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LONDON LETTER.

AN AGRICULTURAL FAIR IN ENGLAND-INVITA-TIONS FROM THE PRINCE OF WALES-WHAT ENGLAND IS DOING TO MEET THE GROWING COMPETITION OF THE UNITED STATES-IM-PROVEMENTS IN BRITISH METHODS OF TILLING THE SOIL, ETC., ETC.

[From our Regular Correspondent.]

London, June 21st, 1879.

The Royal Agricultural Society of England is about to embark upon a spirited enterprise. Invitations have been issued in the name of the Prince of Wales, president of the Royal Agricultural Society, and of the chairman and members of its council, with an invitation that from the 30th of June until the 7th of July an International Agricultural Exhibition will be held at Kilburn, "for horses, cattle, sheep, pigs, asses, mules, goats, hops, seed, corn, wool, butter, cheese, hams, bacon, meat, cider bees and hives." Prizes to the value of nearly fourteen thousand pounds are to be awarded and distributed among successful competitors, and it is expressly added that "all prizes for live stock are open to foreign and colonial, as well as to British, owners of animals eligible to compete." There was once a time when it was reproachfully alleged that agriculture, if, indeed, it could be called a science at all, was the least progressive of sciences. The taunt, unjust when it was first uttered some sixty years ago, is altogether out of date at the present day. The universal and never-ceasing necessity imposed upon the human race of supplying food for the sustentation of every corporeal frame has so quickened the energies and stimulated the intelligence of foodproducers in all countries that agriculture, and the kindred employment of bringing four-footed had a congenial aptitude for the pursuit of a most animals of all kinds to perfection, have long taken difficult and complicated science. their places among finished sciences. By means

of extensive enclosures, large expenditure of capital in draining, improved systems of alternate cropping, ceaseless importation of foreign and increased elaboration of domestic manures, by the cultivation of root crops, ameliorated breeds of horses, cattle, sheep, pigs and poultry; the application of mechanical ingenuity to the improvement of judicious economy in seed and labor, an amount of new and efficient activity has, step by step, been called into being, with a view to enabling the British farmer to meet the discouragement of low prices by the increased productiveness of the acres committed to his charge. Nor have the results attained been unworthy of the sagacious efforts put forth with a view to their realization. Not many days ago a prize-winning Clydesdale mare was sold by a Scotch farmer to Mr. Angus, of Australia, for seven hundred guineas, and it is incontestable that the domestic tour-footed animals raised in these Islands have advanced to a degree of perfection unexampled in any other country.

Nothing, indeed, is more certain than that the existing depression and hard times through which the agricultural interest is passing can alone be met by training increased capital and brains to bear upon the cultivation of fields, and the Royal Agricultural Society of England has played a distinguished and useful part of teaching the middling and lower grades of farmers that their sole hope of surviving consists in the adoption of systems practiced by their more wealthy and enlightened bretheren. Farming, like driving a gig, was in former times supposed to be one of those natural accomplishments which demand no imparted skill, no special education, and until the late Mr. Pusey published a series of essays, in which he endeavored to teach the farmers of England how to meet the necessities of the times, but little had been done to controvert the theory that agriculturists

In 1841 the average produce of wheat in Eng-

land was but twenty-six bushels an acre, and Mr. Pusey showed that if it could be raised to twentyseven bushels, there would be an addition of four hundred and seventy-five thousand quarters to the nation's income, "worth, at fifty shillings a quarter, about one million two thousand pounds, which would be equal to a capital sum of twenty-four millions gained for ever to the country by this trifling increase in the growth of one agricultural staple alone in England and Wales." At present the value of a quarter of wheat is less by ten shillings than in 1841; and, besides there is competition from foreign parts, especially the United States, which, is more likely to grow in pressure and continuity than to decrease, and is supplemented by such an importation of meat, dead or on the hoof, as is full of serious menace to our domestic raisers of stock. Under these circumstances it is more than ever necessary for farmers to sit at the feet of those agricultural Gamaliels to whom the Royal Ag'l Society has long offered encouragement of substantial prizes, backed by its tribute of approbation. "Science with Practice" is the motto impressed upon the Society's seal, and in many of its reports it has quoted with commendation the dictum of Liebig, to the effect that "agriculture is both an art and a science; its scientific basis embraces a knowledge of all ditions of vegetable life, of the origin of the elements of plants, and of the sources whence they derive their nourishment."

New Refrigerating Liquid from Beets.

In Europe the principal supply of sugar is derived from beets; the annual production of beet sugar being now seven hundred thousand tons. Besides this a large quantity of beet molasses is produced, a portion of which is distilled and a coarse sort of whisky made; the stuff remaining in the retort yields potassium salts, which are employed as fetilizers. Sugar, spirits and potash have heretofore been the chief products manufactured from beets. But Mr. Vincent has now succeeded in realizing from the refuse that remains after the beet molasses distillation, a combustible gaseous body, which is easily condensed into liquid form, and is called chloride methyl.

This liquid, obtained as stated from beets, is used in the preparation of some of the analine colors; but it is now found to be especially valuable as a refrigerating agent. By its rapid evaporation a temperature of 55 deg. C., or 67 deg. F., below zero, may be maintained, which is far below the freezing point of mercury. Prof. Huxley says that by this means mercury (which freezes at 39 deg. F. below zero) may be frozen by the pound. For the manufacture of ice this new beet root product promises to become of much importance.

FARM WORK FOR AUGUST.

This month is a sort of half holiday for the farmer, affording as it does, a partial cessation from the many pressing labors which have demanded his exertion for the last two months. His harvests are finished, and his grain and hay secured, perhaps the former has been threshed and sold, or is secure in the granary. The planter is somewhat more busy, for the work of the tobacco planter is never done. Yet, while there is no great pressure of labor to be performed this month, there are many things that must not be neglected, and which will require to be remembered, which we will suggest as a gentle reminder among those things which must not be overlooked by the careful farmer.

TOBACCO.

Keep the tobacco stirred with the shovel plows, top as soon as the "button" appears; do not let the suckers get even over one inch long. Keep down the worms by hand picking and turkies,if no turkies, use Paris Green, mixed with plaster, if the tobacco is not more than half grown. After that stage of growth, we should not advise the use of it. In housing, be careful to let it wilt before handling; expose it as little as possible to the sun, or it will sun-burn. Do not let it lie in large heaps, or it will heat and spoil quickly in hot weather. Give it plenty of room in the house; the sticks should be 15 to 18 inches apart. It will cure better, and as soon as it is half cured, it can be pushed much closer, or what is better, "re-hung"lifted from one tire to the one above.

CORN.

If you have any late corn, work it well and quickly.

RYE.

If you have late corn, sow rye and clover at the last wo king, sowing each before the cultivator, so that the seeds will be covered thereby. On moist low ground which is not too wet, it is a good plan to sow turnip seed and cover them with the cultivator when you work the corn the last time.

If rye is to be sown on fallow ground, or after another crop has been removed, we say we would plow the land deep, harrow it well, and sow broadcast or by some spreader of manure, 200 lbs. of British mixture or some reliable fertilizer, and 1 to 1½ bushels of seed, and harrow it in well or put it in with the double shovel (iron beam), then sow over the whole 3 to 5 bushels of salt with one of plaster, mixed or separate, per acre. From the first of December until the first of April it will yield fine green feed for sheep, colts and your galve

without detriment, perhaps with profit, to the rye and a fine crop of grain could be expected in June. This is one of the advantages of this heretofore much under-rated crop. It is locked upon as a "good-for-nothing,"-put on the poorest land, treated badly from the time it is slovenly put in the ground until it is harvested, and then abused for a poor crop. Good land, good culture, some manure, early sowing, and grazed only by small animals, as the conditions precedent, then there is not its equal in profit-yielding among the small grain crops. Its straw is almost as valuable per ton as hay of the best grasses, if threshed by flails and tied in bundles, and its grain will yield in money very nearly as much as wheat on similar soil. If sheep husbandry is to be ever encouraged this crop will then be fully appreciated.

FALL POTATOES.

Keep these clean, and the soil loose and friable; when they begin to blossom, give them a broad flat hill. Keep off the beetle by doses of Paris Green.

FENCES AND FIELDS.

This month look to the fences and clean up the fields that are in grass or lying uncultivated. Clear the fence corners of bushes and briars, and shrub off or dig up all small bushes, briars, &c., growing over the field, and if any part seems to hold water and keeps wet, drain it.

TURNIPS.

The soil which suits turnips best, is the light sandy loam, and the best preparation by way of manure is the old time plan of cow penning. But times have changed and cow-pens have disappeared. We should spread on an acre, thirty or forty two horse-wagon loads of well-rotted manure, plow six or eight inches deep. After laying 3 or 4 weeks, cross plow, sow 250 pounds of a rich super-phosphate of lime, 10 bushels of bone meal, I bushel of plaster and four of salt, mixed or separate, harrow it in the soil until the whole was fine and the manures well intermixed. Then sow in drill 24 inches apart, or 20 might do. After passing into the rough leaf state, thin with the hoe and to 6 inches apart in the drill and work between the plants with the hoe, and between the rows run often the cultivator, close to, but not to injure the plants. Some persons soak the seed in fish oil for 24 hours and then dry before sowing, in plaster, ashes or meal. If the turnip fly proves troublesome, sprinkle the plants with strong suds, made of whale oil and carbolic insect soap, made now for that purpose; before the dew is off next morning apply soot and ashes in equal parts, or

two parts soot, two of plaster and one flour of sulphur. It may require more than one or two applications of these recipes to drive off the enemy. SETTING LAND IN GRASS FOR MEADOW OR PASTURE.

The best soil for meadow or permanent pasture is a rich clay loam, moist, cool and free from weeds. It should be deeply plowed and thoroughly pulverized. If not sufficiently rich, use generously some fertilizer rich in potash, and also sow to bushels of finely ground bones per acre.

In making a mixed meadow for pasture, we should sow 2 bushels of orchard grass, 1½ bushels Kentucky blue grass, ½ bushel of perrennial rye grass seed, and 5 pounds of sweet-scented vernal grass seed. After the grass gets well up and growing, sow 3 bushels of salt and I bushel of plaster broadcast over each acre, during a moist spell.

STUBBLE FIELDS.

To improve the pasture of stubble fields, sow per acre I bushel of plaster and two or three bushels of salt, with Io bushels of ashes if to be had. Keep the stock off for a week or so.

ORCHARDS.

Keep insects away, burn up caterpillar nests, and pick up all fallen fruit and feed to the pigs, if they have not access to the orchards. Prop up any over-loaded limbs and pick off the meaner fruit.

SHEEP.

This month sheep are liable to have the Gad fly deposit eggs in their nostrils, which soon become active worms to crawl up and cause great distress in the head, often causing convulsions and death. To remedy this, keep a trough, with tar in the bottom and sprinkled over with salt, so that, as the sheep lick the salt, their noses will be tarred.

PREPARING FALLOW FOR WHEAT.

The field should be cleaned and the herbage eaten off by stock, or if not, and a heavy coat of grass is to be turned under, plough deep enough to cover it well and harrow to close the interstices between the furrows, to cause the immediate decomposition of the grass. In this case, it should be cross-plowed before seeding.

The Canadian government has conditionally offered \$10,000 for ten years to the first beet sugar factory established.

Mr. Wm. Crozier, Northport, Long Island, has sold Jersey cow Josephine 2d, winner of first prize at last show of the N. Y. State Agricultural Society, to John I. Holly, Plainfield, N. J., for \$1,000.

GARDEN WORK FOR AUGUST.

Little work is required this month in the garden beyond keeping it clean, saving seeds as they ripen, gathering the different vegetables as they mature, &c., and attending to the following brief hints.

Turnips.—Sow a bed of these before the 10th instant. If the weather is dry, soak the seed and roll in ashes or plaster, and after sowing, press the earth with the roller or the foot, and sprinkle the drills every evening until rain comes.

Celery.—See that the beds are nicely prepared, and set out the plants as early this month as possible; water well and shade from the sun until they get well rooted. Plant celery in abundance, it is a wholesome, delightful vegetable, and all you cannot use, you can readily sell at very remunerative prices. It is always in great demand.

Cabbages. — These should have been set out before this, but it can be done early this month with reasonable prospect of success. Those that are growing should not sufler for the want of cultivation; cabbage requires rich, well prepared soil, frequent stirring with shovel plow or hoe and kept free from insects, for the destruction of which pests, there are many recipes that the cabbage grower should inform himself of and experiment until he succeeds in accomplishing his ends.

Asparagus beds, Strawberry and other plant beds,—Should be cleared of weeds and lightly worked up with the fork and rake. Salt and ashes or fine manure can be sown over the asparagus beds with decided advantage.

Lettuce:—Set out plants for heading next month and sow a few seeds for autumn planting.

Endives.—Tie up or cover with garden pots for blanching.

Small Salading.—Sow at intervals of 10 days small salading of different kinds.

Radishes.—Sow radishes in a rich bed. The Rose or White Chinese are best; the Spanish is a hardy sort, but nothing compared with the Chinese.

Beans.—Beans for pickles as well as for table use, may be planted at intervals during the entire month.

Peas.—Sow a few rows of peas of the early sorts in a shady place.

Spinach. During the first or second week sow a bed of spinach. It is a nice fall dish.

Budding.— Cherries, plums, and other fruits like peaches and pears, &c., may be budded whenever the bark parts freely from the stock.

Ensilage-What is it?

I remember reading a few years ago in some stray newspaper an interesting, but somewhat apocryphal-looking account of a new process of preserving fodder which an ingenious Frenchman had discovered. It seemed beautiful in theory; but not one farmer in a hundred, it is safe to say, would have given credence to the story. The process to which I refer is now known as ensilage, and in France it has passed from the condition of experiment to that of established practice.

The word ensilage means, literally, in a pit, or trench, and stands for the system by which corn or any other green fodder is preserved by burial in the ground. It is also used, metaphorically, for the fodder so preserved. That it is a valuable discovery there is now little room to doubt; and its advocates, although they have not yet caught the popular ear-for new discoveries move slowly -believe it is destined to work a great revolution in agriculture. The inventor of this new mode of preserving green fodder, and thereby carrying the succulence of summer food through the year, is M. Auguste Goffart, a member of the Central Agricultural Society of France. His work was not brought to perfection until many failures had strewn the way, but its success is now unquestioned, and has won for him the distinction of Chevalier de la Legion d'Honneur.

M. Goffart was prompted to his experiments by noticing that the cow which gives such excellent milk, and butter of such fine flavor and color in summer when eating grass, furnishes in winter, when the same grass is turned to hay, a very different milk, and pale insipid butter. He observed, also, that store cattle thrive on green pasture, but that the hay from the same field, even when jndiciously fed, will not preserve them from frequent deterioration. Even where cattle do well on hay, it is surprising how much better the same fodder, if it could be kept as grass, would serve the purpose. The mere process of making hay, therefore, or of curing stalks, is a process of loss. The fine odors and best qualities are exhaled. The special aroma departs. Then, too, there are sudden rains and driving storms to prevent good haymaking and stalk-curing. It was meditation on these facts, which any one might have considered, that led M. Goffart on. He claims to have made thousands of experiments, and to have continued them for a period of twenty-five years.

What is it that M. Goffart does? He digs trenches or pits in the ground, so protected that water cannot flow or leach into them, and then covers their sides with portland cement. This silo, or ditch, he finds is best made in an elliptical form, and with vertical walls; it is easier to use in that shape, and will prove more durable. It should be made as large as is consistent with economical use, since the keeping qualities of the best pit are not quite so perfect on the sides as elsewhere. Of course, the less side space there is—the less necessity of packing in contact with the air, or near it—the better.

In the receptacles we have described, the stalks of corn or other fodder are placed; but not until they are first cut into small pieces by a powerful feed cutter. "The fineness to which I cut my maize," says M. Goffart, "at the moment of ensilation, is extremely important in view of good preservation. Cut in disks of only one centimetre thick (about four-tenths of an inch); the maize packs better in the silo; it occupies less space, and takes the form and consistency of a species of pulp, leaving in its mass the least possible amount of air. In proportion as the length is increased, the preservation becomes less perfect, and finishes by being entirely defective." And here we come to the main consideration of preserving green fodder, viz.: The exclusion of air. Formerly this end was not so perfectly attained as it now is, owing to the attempt to mix with the green leafage dry straw which it was supposed would help preserve it, as well as to the economy of the operation. M. Goffart says he has used on occasion, wheat, oat, and rye straw with his ensilage. But the keeping power decreased as the straw increased. "A fiftieth in volume, or a tenth in weight, was the maximum of what the maize could carry without being exposed to an early alteration." This he attributes to the fact that the straw takes up too much of the water from the green plants. In fact dehydradation ought not to ensue, because the water is wanted not only for the ensilage itself, but to keep out the air, "The moist condition of the ensilage, instead of being a cause of deterioration, is, on the contrary, to a certain extent indispensable to the preservation of the whole matter." And the plan now is to bury the stalks of the plant that is to be preserved almost without any mixture.

The silo, when all is ready, should be filled as rapidly as possible, and the layers should be kept level during the entire process. "The greater the compression the greater will be the preservation." The walls of the silo should be very smooth, and the utmost care must be taken to have the packing against these done with absolute perfection. In France, a woman walks continually around on the stalks to be compressed, but in this country a boy or two, well watched and directed, would serve the purpose. When the silo "is filled

to the top and carefully levelled, spread along the surface short straw four or five centimetres" (or about two inches) "thick; then place on top of this boards fitting close together. These should be put across the silo in order that when it is being fed out they may be taken off one by one as the silo is cut down vertically." On top of this flooring must be piled a very heavy weight—no matter what—of logs, stones, brick, or dirt, so as to secure a continuous density, and the perfect exclusion of air. Dirt is rather objectionable, however, as it is liable to sift through

This last act completes the process, and the fodder so treated remains for months, or until green grass and corn grow again, in the moist, succulent condition in which it was taken from the field the season previous. Perhaps the inventor of this plan is none too enthusiastic when he calls it his profound conviction "that the culture and ensilage of maize is destined to cause a complete agricultural revolution; it ought in ten years to double the number of animals supported on our soil." The translator of M. Goffart's book, writing for our latitude, says that "a cow to an acre is a reasonable result of the practice of ensilage."

The mode of feeding ensilage is to "take each day from your silo the maize required for the next day's use, and fifteen or sixteen hours after, however cold and free from fermentation when taken out, it will be quite warm and in full fermentation, and the animals will eat it greedily. Eight hours later it will have passed the proper limit, and it will rapidly spoil."

Though M. Goffart, by his plucky experiments, which we have no space to recount, is to be credited with the discovery of a new step in agriculture, and a very significant one, there have been examples of the use of his principles long before. In the report of a committee to the Central Agricultural Society of France, made just four years ago, it is stated that "preservation of grape leaves green near Lyons for the feed of cattle and goats has made a high reputation for the cheese called Mont Dore from time immemorial. Apple pomace has been preserved in silos with good results. In various parts of Germany the preservation of vegetables of all sorts—turnips, cabbages, and different kinds of leaves seasoned with celery for feeding cows-runs back as far in the night of time as that of sour cabbage (sauer kraut) for the food of men. In the north of France several large agriculturists have preserved for twenty years in silos the leaves of beets, also the beets cut across, which have kept better than the whole beets in cellars. The pulp of beets from distilleries or sugar factories also makes excellent fodder when kept in silos."

packing against these done with absolute perfection. In France, a woman walks continually around on the stalks to be compressed, but in this country a boy or two, well watched and directed, would serve the purpose. When the silo "is filled" it is not easy to cure. The prickly comfrey of the

Caucasus, which is now widely advertised in the seed catalogues, is an excellent plant for this treatment, and is exactly adapted to go with corn, as the two plants make, when put together, what is called a complete food. It should be remarked that moist weather is not unfavorable to ensilage, but helpful, since the greener the plant is put down the better. At one time salt was Sprinkled on the plants before putting them in the silos, but that practice is now deemed unnecessary.

Lest the reader may chance to think that this whole scheme has rather the flavor of a French fantasty than that of a real experience, I must beg space to quote a few words from the letter of Mr. Francis Morris of Oakland Manor, Howard county Maryland, who tells what he has done in this way. It will be found in Mr. Brown's book, to which

reference has been made.

He says: "I sowed on the 1st of August, 1876, about five acres, in drills three feet apart, and about a bushel of corn to the acre. worked twice with a cultivator, and was in tassel in the first days of October. We cut the same with a mowing machine, carried it in wagons to the feed cutter, cut it up in one-inch pieces, and added to it an amount of wheat straw cut up in the same manner, equal to one-fifth of the corn fodder. I had three silos bricked up inside a stone barn. The silos were about ten feet deep and four feet wide and twenty-four feet long. They were covered with boards, on top of which heavy stones were used for weights. The first heavy Stones were used for weights. silo was opened on the Christmas following, and all the cows were fed with it. Two of them refused to eat their portion, and when they left their stalls the other cows ate it; and from that day I have never fed it to an animal that has refused it. Horses, mules, oxen, cows, sheep and pigs will all leave any other feed and eat this by choice." Mr. Morris's experiment in 1877 and 1878 were equally successful and he adds:

"In a very long experience in raising stock I have found corn fodder preserved as above stated the best food for milking cows that I ever used. It is equal, if not superior, to some grass, and its cultivation is so easy, its preservation so inexpensive, that to-day no one can estimate its advantage to the agriculturist."

Mr. Goffart says that "sheep and cattle fatten with wonderful rapidity upon maize ensilage, with the addition of eight to ten per cent. in weight of oilcake meal." But I am obliged to forego the publication of other interesting facts.

As the average hay crop of New York is less than a ton per acre, Mr. Morris rightly wonders what will be the result when corn (which will easily produce twenty-five tons of stalk feed to the acre, and a good deal more by special manuring) is planted on one-tenth of the arable land. He thinks we could double and quadruple our stock, not once, but many times, by so planting the land in connection with the ensilage. But if corn multiplies, cattle will multiply in return the acreage of corn; and thus the vistas of productiveness that are in view by this process it is not easy to set forth on paper.

I fear that, in the effort to be brief, I may have made this description of ensilage in some measure imperfect; for there is nothing that concerns it

which is not now of prime interest. The process does for the horse and cow what the fruit-can does for the human table. It extends the fruits of summer and the harvest through the winter of the temperate zone. But while to the animal it means additional comfort and thrift, to the farmer it realizes a dream of wealth that he had never before suspected.

One of our most acute and observant writers lately asserted that in the Eastern States and in England land will now hardly support in a plain way the person who works it. Little land, if any east of the Alleghanies, he thinks, will enable a farmer to maintain himself and his family decently, and pay rent besides. In New England they cannot live as the older generations did, even without paying rent; and the conclusion he arrives at is that farming in such localities "will not yield permanently the means of sharing in the elegancies of life," or enable the farmer to participate "with much keenness in its intellectual movements." The tendency of farming in the old ruts, it is plain to see, is that of a distinct return to the peasant type; and a little more of this drift will leave the personage who has so frequently been patronized as "the country gentleman" as extinct as the plesiosaur and the dodo.

But perhaps a new system may yet enable us to retain our modern advanced standard of living, by showing the way to enhanced productiveness and profit. It may be that ensilage marks the new departure we are to welcome; but whether so much as this can be expected, it is certainly a process which no intelligent agriculturist can aliord to let escape his notice.—Joel Benton, in New York Sun.

How to Save Clover Seed.

One of our best clover seed savers is just at our elbow, and he says: "Tell them the second crop is for the seed, and is really fit for no other purpose, as it salivates the stock fed on it; that the best time to cut for seed is a very nice point to determine. It should be cut when a majority of the heads turn brown, and before any begin to shed off the little seed pods, each of which contains a seed. Cut the second crop of clover just as though it were for hay, rake it into windrows, and let it lie and take one or two showers; then put it into very small cocks while damp, about one good pitchfork full in a place, and when it is dry put into stacks and cap with something that will turn water; or what is still better, if yon have a shed or barn, put it there and let it remain until you get a huller to take it out for you. There are hullers enough now in the State to hull all the seed needed for home use, and the owners of the hullers are willing and anxious to go to any section where work can be had. Let our farmers save all the clover seed they can, and thus help to make thousands of dollars for the State, now sent out each year for clover seed to sow.—Rural Sun.

Rights in the Road.

If a farm is bound by, on or upon a road it usually extends to the middle of the roadway. The farmer owns the soil of half the road, and may use the grass, trees, stones, gravel sand or anything of value to him, either on the land or beneath the surface, subject only to the superior rights of the public to travel over the road, and that of the highway surveyor to use such materials for the re. pair of the road; and these materials he may cart away and use elsewhere on the road. No other man has a right to feed his cattle there, or cut the grass or trees, much less deposit his wood, old carts, wagons or other things thereon. (8 Met. 576, 8 Allen, 473, 1 Pa. St., 336.) The owner of a drove of cattle which stops to feed in front of your land, or of a drove of pigs which root up the soil, is responsible to you at law, as much as if they did the same things within the fence. Nochildren have a right to pick up the apples under your trees, although the same stand wholly outside your fence. No private person has a right to cut or lop off the limbs of your trees in order to move his old barn or other buildings along the highway, (4 Cush, 437) and no traveler can hitch his horse to your trees in the sidewalk without being liable, if he gnaws the bark or otherwise injures them (54 Me., 460). If your well stands partly on your land and partly outside the fence, no neighbor can use it except by your permission. Nay more, no man has a right to stand in front of your land and insult you with abusive language without being liable to you for trespassing on your land (II Barb., 330). He has a right to pass and repass in an orderly and becoming manner; a right to use the road, but not to abuse it. But notwithstanding the farmer owns the soil of the road, even he cannot use it for any purpose which interferes with the use of it by the public for travel. He cannot put his pig-pen, wagons, wood or other things there, if the Highway Surveyor orders them away as obstructing public travel. If he leaves such things outside his fence, and within the limits of the highway as actually laid out, though some distance from the traveled path and a traveler runs into them in the night and is injured, the owner is not only liable to him for private damages (15 Conn., 225), but may also be indicted and fined for obstructing a public way And if he has a fence or wall along the highway he must place it all on his own land, and not half on the road, as in case of division fences between neighbors (4 Gray, 225). But as he owns the soil, if the road is discontinued, or located elsewhere, the land reverts to him, and he may enclose it to the centre and use it as a part of his farm.—Judge Bennett.

Hints in Road Making.

There is no class of the community that is more affected by the condition of highways than farmers. Upon them are transported whatever surplus products the farm affords, and upon them the farmer depends for his opportunities to pass from one neighborhood to another. Now, so far as the transportation of heavy loads is concerned, the amount that can be transported bears a direct proportion to the condition of the road bed, and its declivity; both of which may be combined to greatly reduce the load, or either alone may be the means of measuring the load that can easily pass along without serious hindrances. Aside from that class of obstacles which may be properly considered as insurmountable, in all cases roads should be improved in every possible direction, and by all practical means. Other things being equal, the more firm the road bed, the better it is for travel, and, also, the better for conveying loads. But very frequently the road passes over such a variety of soils, even in moderate distances, as to present a variable surface; wherever such cases occur they can be amended by artificial means, that is, if a portion should be sandy, by the addition of a little dry or compact earth, its condition will be changed as to make it much harder and better able to sustain a load. Atmospheric conditions may, also, very materially affect temporarily the surface of a traveled road, aside from those changes occasioned by frost; thus a clayey road which would be rendered exceedingly muddy after a severe shower, would be very much improved by the use of sand and gravel. Where the soil is inclined to moisture, a partial system of underdrainage will not only prevent mud at the time of showers, but will also very much assist in maintaining a good condition when the frost is coming out in the spring, which otherwise would render it impassable.

As a general rule, in the repair, saying nothing of the construction of roads, too little regard is paid to the material employed; it is entirely wrong to make use of vegetable matter that is subject to decay and change, for although when in a dry state it may be passable upon a road, when wet by means of rain and showers, it occasions slough holes of mud. It is better for the farmer, and certainly much better for the road, to have sods growing in the ditches conveyed to the farm yard and used for composting, rather than have them used in any repairs. Where it can be obtained under ordinary circumstances, a gravely loam will make a good average road bed, and will become so compacted as to form a comparatively hard and smooth travelling path and is the material which should be used. It is no uncommon thing to see upon a much traveled road at some point, a short distance that is extremely bad under nearly all circumstances and which remains the same year after year for want of an application of a few common ideas in the matter of repairs-New England Farmer.

The Poultry House.

Common Purslane.

Everybody who has a garden or vegetable patch in New England knows what this little succulent plant is. We, last season, mentioned how useful a species of green food this is for poultry. And many a bushel that ordinarily would have been suffered to go to rot, or to the pig-pen, if gathered after the first corn and potato field hoeing, was picked up and fed to the farmer's fowls, last year, upon our recommendation in the Poultry World. This spreading weed grows quickly and may be taken up in quantities the last of this month and during July and August anywhere in our plowed fields or spaded gardens, where the soil is pretty rich. You certainly wont find it in poor ground. Gather a peck or half a bushel in the morning, while the dew lies upon it. Scald two quarts of corn meal and brand, chop the "pussley" with a sharp spade in a tub or firkin and mix it with the meal. Feed it to your twenty, thirty, or forty fowls, and you will find that they will devour it with a grand appetite. It costs little or nothing, and for the present season, while grass is becoming tough and wiry, it will answer an admirably economical and beneficial purpose, as every one agrees who has tried this hitherto quite neglected but useful and nourishing food for domestic fowls. Poultry Worla.

MITES IN A POULTRY HOUSE .- Turn out the fowls some cool or damp day, and then close all the cracks in the house except the door. Then take a kettle of live coals and place on the ground in the centre, but if there is a wood floor, lay a flat stone in, on which set the kettle. Throw a half pound or pound of sulphur upon the coals, and shut the door and leave the house closed for a few hours, and we will venture to say no more lice or mites will be found in it for a few weeks thereafter. If the house is not tight enought to admit of thorough fumigation in the manner described then clean as well as you can, and then whitewash with fresh lime, mixing in a liberal quantity of sulphur, after which throw sulphur into all the cracks, and apply kerosene oil to the roosts. The house should be well aired before the fowls are admitted, and well ventilated at night. We have never known the "sulphur cure" to fail if properly applied. Baltimore Live Stock Bulletin.

Vermont sends more sheep to Boston than all the other New England States combined.

Plymouth Rocks.

Americans can justly pride themselves on the success they have achieved with poultry since they first undertook the task of improving it. While we have greatly improved the different breeds we have originally brought from across the seas, we have not been idle with our time, and have produced an American breed which is sure to do us great credit everywhere on account of its intrinsic merit. The Plymouth Rocks are yearly becoming more popular, the demand fully keeping pace with the supply from breeders, who give them the best of care and attention and much of their time, and many of the other breeds have to give way to them. They are when well bred, very handsome birds, and cannot help but prove attractive, even to those who do not belong to the fancy, while they have real merits which commend them to all who want a "really first class breed." We are pleased to see the friendly discussions, from time to time, in regard to the different points of the Plymouth Rocks, for it serves to bring out the views of the best breeders, and thus conduces to improvement in all particulars.

Americans can well be proud of this noble breed of poultry, and our cousins across the water are beginning to appreciate them, too, by ordering them from our well-known breeders.

Food for Young Turkeys.

In some cases, even best of care fails to secure a good number of young turkeys. Before they have fully feathered up they are the tenderest of birds, but when they have put on a full dress of birds, but when they have put on a full dress of feathers, nothing in the way of poultry is more hardy or less liable to disease or disorder. As young turkeys, like young guineas, make such very rapid growth of feathers when young, they require constant care, and food in fair quantities and often, to enable them to withstand the great strain on their systems; and not supplying them fully at that stage of growth is what causes so many to drop off suddenly, from no apparent cause. Boiled egg chopped fine no doubt makes Boiled egg, chopped fine, no doubt makes a good food for turkeys, to commence with, but it is not at all necessary. One of the most successful breeders of turkeys we know of never fed a crumb of boiled egg, but commences with stale bread crumbs, slightly mixed with new, fresh milk, giving them five or more feeds daily, but only in such quantities as they would eat up clean at every feed. Onion tops or lettuce, chopped up fine, and mixed with their food, was given, while an occasional seasoning of red (cayenne) pepper was supplied. They were treated to sweet milk for drinking purposes, and when they got some little age, cottage cheese was liberally supplied—and they are fond of it. There is as much in the care as in the feeding, and they must have the best of both to induce them to stay with us. Dampness and dew are fatal to young turkeys; the remedy suggests itself a preventive.—American Poultry Yard.

HORTICULTURAL.

Shade Trees.

Maples are rapid growers, pretty and make a fair shade. The Tulip is a moderate grower of stately aspect, and its leaves are said to yield honey to the bees. The Poplars-balsam and others-grow rapidly, do not spread much, and are frequently broken in storms. The Silver Poplar and Silver maple are beautiful; when high in air a gentle breeze displays the lower side of the leaves. The former requires great care to keep it within bounds. The Horse Chestnut is of slow increase, but of beautiful early foliage: it soon develops a large terminal bud and waits till next spring. The Common Chestnut is so well known to all, especially to boys, that its majestic beauty, when mature, is overlooked. It is one of our largest trees, and some fine specimens of ancient times, often mentioned by historians, are still mute witnesses of ancient deeds. The Catalpa is a straggling tree of small size, late in leafing; of little shade but with fine flowers, each of which is a marvel of beauty. The Paulownia, very similar in appearance to the Catalpa, bears profusely in June long flowers (like the Digitalis) of great sweetness. The Linden grows slowly, is very compact and gives dense shade. The flowers conspicuous, but of a delicate, powerful fragrance The Weeping Willow, with its long, drooping, delicate shoots, is one of the first trees to start in the spring, and furnishes more shade from the trunk than from the foliage. The American Elm is a beautiful tree, but requires much room to show its true character. It is better for the road than for shade on a lawn, although there, a fine old tree is a most charming feature. The Black Walnut, of slow growth when young, attains beauty and sometimes immense size and grandeur with age. The Ash is seldom used as a shade tree, and is probably less known than any of the above. It has no striking points. The feathery tender growth of the Larch in the spring, and its beautiful cones later, are greatly admired. Many of the evergreen Conifera are of artistic value and are prized most in the winter, when their companions have cast off their summer garb. The Ailanthus (tree of Heaven) from China, a graceful, rapid grower well known in our cities, exhales a sickening odor when in flower. The White Birch is scarcely a tree of shade. Its snowy bark, its dark foliage, and its long, drooping, graceful sprays, combined, make it one of the most beautiful objects of the The foliage of the Purple and Copper Beeches is much admired, being distinct from the

common color of trees. The tender shoots, taken off in spring, just when the leaves are expanded, and ironed to preserve the shape, are fine wall ornaments. There are many specimens of Oaks in cultivation, some very beautiful; generally, however, they may be considered as of slow growth and inferior for shade. Many drooping trees of the grafted varieties are highly ornamental, but of little value. Fruit trees, as apples and cherries, have generally a ragged appearance, and though very good in themselves, should have no place on an otherwise well kept lawn.—Moore's Rural Life.

Introduction of the Tomato.

Of the introduction of the tomato into the United States, a correspondent of the Boston Transcript gives the following account: Captain Phineas Eldridge was a resident of Carpenter street, west of Fourth street, Philadelphia, in 1793. During the San Domingo wars between the negroes and the whites, many of the latter fled to the United States, and the more careful and enterprising brought fruit and seeds peculiar to that island with them. A Frenchman named Nicalo, with his family, became a resident of Philadelphia in 1798 and occupied a lot next to Capt. Elkridge. Nicalo and family brought a variety of seed with them, which they sowed and cultivated, among which was the tomato. Capt. Eldridge and family became acquainted with the fruit and its uses by their intimacy with the Nicalo family. dressed and used it as a salad and were fond of it. Other neighbors procured the seed, but cultivated it merely as an ornament, many being under the impression that it was poisonous. The tomato was used as an article of food in New Orleans in 1812. They were not however, sold in the markets, even in Philadelphia until 1829. The French refugees from San Domingo introduced many new and excellent plants and vegetables and cultivated them in the gardens of Maryland, Delaware and other places near the shores of the Chesapeake

THE MILK TREE.—The milk tree is a native of South America. Its fruit is about the size of a small apple, but the milk is the greatest wonder, which is procured by making notches through the bark. At first when it runs out it is as thick as cream. It has the same properties as glue.

THE CAMPHOR TREE.—It grows in Japan and in some of the islands of the Pacific. The camphor is extracted from the wood of this tree, where it is formed in concrete lumps, some of which are as large as a man's arm, though this is rare. The tree has to be sacrificed to procure the camphor,

BEET SUGAR.

Napoleon Bonaparte originated the idea of making sugar from beets on a large scale. It was a part of his scheme for excluding English colonial produce from the French market. It had previously been proven that a crystallizable sugar could be obtained from the juice of the beet, and he encouraged the establishment of beet root sugar manufacture, on a large scale by every method that monoply and premiums could give. Colonial sugar sold for a dollar a pound, and as sugar had become an indespensible article of luxury in France, the manufacture of beet sugar had every factor of success in its favor, excepting the fact that the process was expensive, and required considerable skill. But the manufacturing process has since been much improved, and to-day it promises to rival, if not supersede the sale of cane sugar throughout the world. When beet sugar is refined, it is said to be impossible for the best judges to perceive any difference either in taste or color from sugar cane sugar. A recent writer affirms that 4000 pounds of sugar can be produced from one acre of ground right here in New England. If the manufacture of beet sugar becomes general in this section, as seems to be possible and probable, it will introduce a new era in New England farming. It will stimulate thorough cultivation of small farms, skill on the part of the farmer, besides furnishing a large quantity of food for his cattle from the beet pulp, and also saving to our own country millions of money which now go to foreign ports for this one important article. the sugar beet can be raised here as well as in France, I see no reason why, in a few years, our old and neglected farms in New England may not be made "fruitful fields" and gardens of beauty and plenty .- T. P. BRIGGS, in New England Farmer.

THE Cow TREE.—The cow tree, or palo de vaca, grows on rocks in Venzuela, South America. It has dry and leathery leaves, and by making incisions in its trunk a kind of milk oozes out, which is tolerably thick and of an agreeable balmy smell. At sunrise the natives may be seen hastening from all quarters, furnished with large bowls to receive the milk.

SURE DEATH TO THE CABBAGE WORM.—For every hundred head of cabbage I take a quarter of a pound of black pepper and put it in a box large enough to sift out well. Go into the patch before the dew is off and pepper the cabbage well. Two or three times will be sufficient. The worms go through the leaves and die."

Success in Strawberries

If our people would take the little trouble requisite to provide for their families, if not for market, an abundance of this delicious and healthful fruit, they would be less frequently troubled with maladies incident to a climate more or less malarial, to say nothing of increase of table luxuries.

To illustrate the case with which this may be accomplished, I may cite a case of abundant yield this summer in our own neighborhood. A son of our clergyman raised on a measured one-twenty-fifth of an acre, at St. Barnabas' Rectory, near Brick Church Station, from choice plants of best varieties, set out last summer, one hundred and ninety-five (195) quarts of magnificent berries, some of them. I am informed, measuring five and a-quarter inches in circumference and all of them extra large. There were counted on a single plant seventy-two (72) well formed berries. They continued in bearing more than three weeks.

The best time for setting them is in August, this will bring a crop the following summer. The plants ought to be carefully set with roots spread out, in good, well dug soil, in rows 25 or 30 inches apart, the plants 15 or 18 inches in the rows, and if kept perfectly clean and a good covering of stable litter placed between the rows during the winter, an abundant crop may be looked for.

C. F. BILLOPP, in Marlboro' Gazette.

The Ailanthus as Timber.

The American Agriculturist, in an article on that much abused tree, the ailanthus, gives the following information in regard to its great value as timber, taken from a paper on the subject by Prof. C. S. Sargent. In experiments made in the French dockyard at Toulon, where the wood of this tree was tested as to its tenacity, or ability to resist a strain, in comparison with the timber of European elm and oak, an average of seven trials showed that the ailanthus broke with a weight of 72,186 pounds, while the elm in a similar number of trials yielded to 54.707 pounds, and the oak, in the aver age of ten specimens, broke under a weight of 43,434 pounds. Evidence as to the value of ailanthus timber in exposed situations and as to its durability when set in the ground is yet meager, but the little that we have is favorable. Of its value for interior work and cabinetmaking there can be no doubt, the wood possessing properties remarkable in so rapid-growing a tree. The wood is at first of pale straw color, but grows somewhat darker with age, and takes a high polish.

When cut to show the silver grain it presents a satiny luster that is very pleasing, and as regards freedom from warping and shrinking it is superior to walnut and fully equal to mahogony.—Scientific American.

THE CUCUMBER ENEMY.-The striped bug, Diabrotica vittata, seems to be a natural enemy of the cucumber, and against him I have tried all sorts of remedies which I have seen recommended. Boxes with thin cloth tacked over the top are effectual preventives, but if one has many hills devices of this sort are expensive. The last season I kept vines free from bugs by the use of ashes and kerosene. I moistened the ashes with kerosene, and applied a handful to the center of each hill. It seemed to spread too strong an odor for them, and they beat retreat. After commencing to bear, we look them over every day, and gather some for pickles, saving a few of the earliest and most perfect ones for seed, and when they are ripe we pick them off and place them in the sun a few days; and then the seed is taken out, washed clean, dried, and put in paper bags for the next Spring's planting .- Rural New Yorker.

Saltpetre for Bugs.

The Southern Husbandman says: To destroy bugs on squashes and cucumber vines, dissolve a tablespoonful of saltpetre in a pailful of water, put a pint of this around each hill, shaping the earth so that it will not spread much, and the thing is done. The more saltpetre, if you can afford it-it is good for vegetable, but death to animal life. The bugs burrow in the earth at night and fail to rise in the morning. It is also good to kill grub in peach trees-only use twice as much, say a quart to each tree. There was not a yellow or blistered leaf on twelve or fifteen trees to which it was applied last season. No danger of killing any vegetable with it-a concentrated solution applied to beans makes them grow wonderfully.

OUNCE WEIGHT.—Sometimes we are at a loss for an ounce weight, when, perhaps, we have one at hand without knowing it. Just take three old-fashion copper cents, or five of the present two-cent pieces, or ten of the present nickel cents, and we have at once a good ounce weight. A nickel cent piece may be considered a good 44 grain weight. Some suppose an ounce of quinine, or of any other medicine bought from a medicine store is 480 grains, but not so; an ounce by buying and selling weight, whether it be medicine or anything else is just 437½ grains.

Uncle Jesse, for Rural Register.

Pearl Millet.

July 12th, 1879.

Editors Maryland Farmer:

Judging from the tone of your remarks regarding an article taken from a paper called the "Planter and Grange," published in Atlanta, Geo., which proceeded in a most vindictive spirit to abuse that able and enterprising public benefactor in agriculture, Mr. Peter Henderson your faith in that gentleman's statement regarding "Pearl Millet" seems somewhat shaken. Now, let me, for the benefit of my brother farmers, beg that you will stand fast by Mr. Henderson and his "Pearl Millet," and endorse his enterprise in bringing to our notice what must eventually prove our most important forage plant, even if it does come to us in "fancy paper packages at \$1.60 per pound," it is cheap.

It seems to me positively incredible that any man, particularly one occupying the position of editor of an agricultural paper, could have possessed such useful knowledge and kept it from its reade:s, well might it be said of him, "and still the wonder grew."

I read Mr. Henderson's extraordinary report of his cultivation of Pearl Millet, and having followed his advise in so many things pertaining to gardening, found him invariably correct and in all things perfectly reliable. I immediately, with greatest confidence, decided to try the cultivation of "Pearl Millet. So far, I have harvested one crop,—prospect for the second is simply grand. The second growth being greatly in excess of the first, I can say the result has been most satisfactory and so profitable, that if I never got another crop, I should feel amply paid, and can thus far bear out Mr. Henderson in his statement.

I certainly failed to see what provoked such an attack on Mr. H., was it because he called it 'Pearl" Millet? even if he did call it "Pearl Millet." it was not for the purpose of obtaining \$1.60 per pound, for in his article he most distinctly tells us exactly what it is, gives us its several names, and his statement was entirely devoid of anything like mystery, on the contrary it was very simple. If the editor of the Planter and Grange is and has been so long conversant with this plant. he might inform us wherever Mr. H.'s statement was not correct; on the contrary I think he clearly admits that he really did not know its product virtues or real value, only that he and all the other boys knew it was called "Cat-tail Millet." "Horse Millet," and in their estimation was not worth \$1.60. However, that remains to be seen. and if Mr. H. obtained that price it was simply

business. I am perfectly satisfied with my experiment and shall plant it every spring and remain always grateful to Mr. Henderson for his information.

As soon as I shall have harvested my several crops of this beautiful fodder I will give you a statement. I hope I have not presumed in writing you, or spoken too much in Mr. H.'s praise, but indeed he deserves all we could sav, and in closing this I most confidently predict that long and loud will be the praises of this plant, and that its cultivation will be most popular and general, especially among our market gardners when they will have ascertained that a few rods of Pearl Millet will produce as much fodder as an acre of anything else. I take great pleasure in showing mine to all my friends and advise them to plant it. I cut my first crop in 51 days, now ten days since I cut it, it has grown 18 inches. The cold winds we have had this summer operated a little against mine: the ground was not warm enough, however I can speak more confidently at the finish. have written in great haste, but will endeavor to be explicit in my next. J. A. SMITH.

NOTE BY EDS. MARYLAND FARMER. - We have as high respect for Mr. Henderson personally and as much admiration for him as an author and practical benefactor of husbandry as our correspondent, but as public journalists we feel it our duty to give both sides a fair hearing on any subject connected with agriculture, or we should not be true to the interests of our patrons or the cause we advocate. Our article, as it says if properly read, was more in jest than serious earnest, to draw out discussion. Since that article was written by us we have seen in the Country Gentleman and other papers very different statements in regard to pearl millet than the one made by our friend S. We shall be happy to have his second article and as many more on this or any other agricultural subject he chooses to write upon. What we did say and what we say now, but we will be happy to be convinced of our error, that while this pearl or cat or horse millet is a wonderful forage crop to be used in the soiling system, if properly planted in a soil suited to it and cultivated with judgment and aided by a fair season, yet we do not, from all we have read and heard and known of it, believe it will pay to be grown as dry provender or hay. If properly ensilaged it might become the wonder that it is claimed to be. It is yet to be tested as a dry food for cattle in comparison with clover or timothy hay, or corn fodder.]

Chew Jackson's Best Sweet Navy Tobacco.

Among the Granges.

At the regular meeting of Brighton Grange No. 60 of Montgomery County. Md., on the 27 of June last, W. M. Isaac Hartshorne in the chair; among other proceedings. Bro D. Lawrence, offered a resolution looking to the appointment of a committee to inquire into the details of taxation, and report specifically in items where there could be a reduction in the expense of public administration; considerable debate ensued, during which Bro. A. B. Davis, visiting member from Olney, was offered the privilege of the floor to express his views on public education, which were substantially that the ordinary branches of primary education, reading, writing and arithmetic, with perhaps grammar and geography were sufficient for all the practical purposes of primary education, and the people ought not to be taxed for teaching pupils the higher branches. These views were supported by an elaborate argument, which received a great deal of approving comment, for which the speaker received a vote of thanks by the grange. Discussion ensued on the educational phase of reduction in taxation thus introduced, when it was referred to the committee on items of reduction in the public taxes, previously appointed, consisting of Bros. Lawrence, Scofield and Charles R. Harts-

An abstract was read from the MARYLAND FAR-MER, calling attention to the distribution of "Cat Tail Millet" seed, (long known and for sale cheap in the South) by seedsmen under the name of Pearl Millet at large prices, and as members of the grange had purchased this seed, the whole matter was referred to the worthy lecturer to make inquiry and report.

Bro. Lawrence, offered some resolutions, expressing the disapproval of the grange of every species of bribery and corruption, whether liquor, money or merchandise, sometimes employed to influence the action of voters at primary or general elections, passed unanimously and ordered to be sent to the press for publication, and the delegates of the grange in the county grange were instructed to present them to that body for their endorsement.

Limestone Valley Grange No. 70 held its regular monthly meeting at Clarksville, Howard county, Md., on Thursday, July 3rd. W. M., F. C. Pue, in the chair, James Harban, Secretary. Bro. D. Lawrence, visiting member from Brighton Grange in the overseer's chair. Bro. Harban made a partial report of committee on the new grange hall and asked continuance of committee. The chair announced the death of our valued Brother Thad-

deus S Clark, and suggested that appropriate action be taken by the grange.

Bro. Lawrence spoke at considerable length in eulogy of the life and services of Bro. Clark, and moved the appointment of a committee to prepare resolutions of respect to his memory and sympathy with the family and friends of the deceased. The committee. consisting of Bros. Harban, Linthicum and Hardy, reported appropriate resolutions. after which the labors of the day being ended, the grange closed.

"A Reply to Kent."

Editors Maryland Farmer:

Our attention has been called to an article in your June number, signed by "Kent" and P. W. Wilson, while several formulas are incidently mentioned, the one quoted, owing to the proportions being the same, has been taken for "Powell's Prepared Chemical Formula for Tobacco." Feeling sure you would not intentionally do any one injustice, we request you to publish this short replv. While we concede to every one the right to criticise any of our manufactures, we think as to the commercial value, should this formula mentioned be intended for ours, it would have been better for the "analytical gentleman" to have inquired of us as to the quality and condition of the chemicals used, and not go upon supposition in fixing their value. All information on this subject would gladly have been given either to "Kent," Mr. Wilson, or any one else wanting to investigate this subject. We use the name "Powell's prepared" to our chemicals with a full knowledge of the definition of the word "prepared," which word as used by us seems to excite so much comment, we assure "Kent" no charm is put upon the "prepared chemicals" by incantation or otherwise, but they are carefully prepared, made ready for use, by which the farmer, when following our directions, can make a complete fertilizer, which we guarantee to do all we claim for it. The main point, you know Messrs. Editors, is to produce the crops at the lowest possible cost, this, we think can be done by the use of "Powells prepared chemicals," and all we ask of any one doubting it to write to us for the proof.

Yours truly, W. S. POWELL, Treasurer of the Brown Chemical Co.

The MARYLAND FARMER is becoming very popular among the farmers of this county, and is one of our most reliable agricultural works.— The Republican Citizen, Frederick, Md,

For the Maryland Farmer.

Securing the Hay Crop.

There is no branch of farming more important than that of securing the hay crop, for the reason that the welfare of all farm stock, depends very largely upon it. Its use may be supplemented by the use of grains, but yet it seems to be necessary to the proper health of animals that they be provided with some of this coarser material for their sustenance, and with young animals it is even better that they be fed wholly upon hay if it is cut in season and properly cured.

Upon the question of cutting and curing there is considerable diversity of opinion, and while there is a growing tendency to work into the correct path, there are still some who hold tenaciously to old ideas that if followed, work injury to the hav crop. In former years it was customary to do all the work of hoeing and much other farm work. such as sowing buckwheat, &c.. (this applies to the more Northern States) before commencing cutting grass. notwithstanding how ripe it might be. To be sure, cattle would eat the hay, more from necessity that from a like for it, but many times would barely survive the winter's feeding, for the simple reason that the cutting of the hav had been so long delayed that those clements that should go to furnish nutriment to the animal had very largely changed to woody fiber, and hence possessed comparatively little nutritious substance.

It is wholly unnecessary to depend upon scientific analysis to determine the comparative feeding values of hay cut in and out of season; any healthy animal will solve the question without the aid of laboratory exercise, and whenever an animal from choice, takes with apparent relish, hay, that not only is cut when dried, but is additionally dried before coming to the mow, and without any fragrance whatever, in preference to hay that is cut while yet filled with the rich juices of the grass, not so intensely dried, but that it will hold some of its freshness, and comes from the mow with a "sweet perfume," there will be an argument for late cut hay.

We have always been favorable to early cut hay and have been gratified in observing the force of example as it has developed itself in a disposition to cut hay much earlier than formerly. It should be the aim of farmers to avoid, as much as possible all errors, and we believe, that none are more disastrous than letting grass stand too long before cutting, and drying it too much after it is cut.

In order to secure the best hay crop the cutting should commence about the time, or just before the grass comes into blossom; it is then presumed to possess a maximum of nutritious principles, and while in this particular condition it requires more care in the curing than fully matured grass, the error of over-cutting should not be fallen into. The great thing to be avoided in curing hay, is the presence of any external moisture, which will tend to make the hay mouldy and musty; with all the external moisture dried out and the hay thoroughly wilted and carted to the mow while yet hot, there will be no danger but that the hay will come out in winter possessed of a rich aroma that will serve to tempt the appetite of the animals before which it is placed.

Hay placed in a mow in this manner will settle and compress itself, and will seem to retain its flexibility in distinction from such as is dried so as to lie loose like straw and appear coarse and brittle, much to the disgust of the animals that are expected to eat it.

There are probably few farmers that have not noticed a difference in feeding of hay of apparently the same quality but possessed of the conditions mentioned. While one would be eaten clean, the other would be nosed over, broken up, and finally, very largely left in the manger.

We fully agree with our friend, A. U. Cheever, editor of the *New England Farmer*, who favors early cutting of grass, even commencing if necessary the fore part of June or even the latter part of May. It requires little more labor, and is certainly labor well expended, rather than to wait for the grass to develop woody fiber, that requires no time in the making.

With all other farm labor the study is to perform it at such time and in such manner as will secure the most satisfactory results; then why not adopt the same rule regarding securing the hay crop?

Columbia, Conn.

WM. H. YEOMANS.

BLACKBERRY ROOT GOOD FOR SUMMER COM-PLAINT .- Dig the green roots, rejecting those that are large and woody. Wash thoroughly clean, and steep in water at the rate of a quart to half a pound of the root, boil down one-half and then strain or pour off. Put the liquid in a bottle with about one-eigth its bulk of brandy, whisky, or alcohol, to keep it from souring and cork tight. A tablespoon of this, rather less for a child, is to be taken three or four times a day, say before each meal time. We would not go from home, especially southward, without taking this preparation along. Blackberry brandies or cordials made from the berries are of little account as remedies for the diarrhœa. The virtue lies in the roots, not in the berries .- Agriculturist.

OUR LETTER BOX.

The Old Dorsey Reaper and Mower.

Greenwood, June 24th, '79.

COL. BOWIE.

Dear Sir:—When I last saw you in the cars you asked me at parting to give you an article for the MARYLAND FARMER. I only yesterday accidently came across the article I now send you, on the Dorsey self-raker and reaper, written nearly twenty years ago.* I have to-day seen four of these original machines at work, and although nearly twenty years in use, doing the work in heavy and in some parts of the field in tangled wheat, as well as when new and first introduced into the harvest. As a Maryland machine which has so long and so successfully stood the test of use and competition, I send you the article describing it and submit to you whether it it is worth a place in the MARYLAND FARMER.

The only modification which time has proved to be advantageous is the separation of the mower from the reaper. The shifting of the same machine from the reaper to the mower, although possible in skillful hands, is too troublesome and complex for ordinary tarm laborers. An independent machine for each is the perfection of the reaper and the mower. Very truly yours,

A. B. DAVIS.

* MARYLAND AHEAD OF YANKEEDOM.

I have completed my harvest of sixty acres of clover and over 100 acres of wheat and rye, mostly wheat, with one of Dorsey's Maryland self-raking combined reaping and mowing machines, which after a trial of four years, I have no hesitation in pronouncing the most perfect and efficient machine of the kind now in use. When first introduced by its ingenious inventor it encountered the established competition of Hussy's, Manny's, and McCormick's world renowned reapers, all of which were well represented in this portion of the State. The result of a fair trial and experience has been to drive them all out of use. I have myself one of Hussey's reapers laid up as a monument to his genius and faithful workmanship, which is due to his memory as the original and first successful inventor of the reaper. A neighbor has laid by a McCormick and purchased one of Dorsey's in its place; another sold a McCormick for \$35 to purchase a Dorsey at \$135; others have either sold at low prices or laid by the Murray to buy in its

OBSERVER.

place the Dorsey machine: and all as fast as they can wear out or dispose of either the Murray or McCormick will replace them with the Dorsey machine. The advantages of the Dorsey over all others, are, first, lightness of draft, and secondly, that while it cuts as clean and beautiful a swath as any machine can do-it at the same time does its own raking without the use or assistance of manual labor. In mowing you remove the platform and self-rake, clean the knives, and it beautifully spreads the hav for drying and curing, and in reaping with the platform, it rakes and at the same time deposits the wheat, rye or oats, in straight and even bunches at side delivery, entirely out of the track of the horses, and ready for binding or carrying to the shock without binding, as the convenience and practices of the farmer may prefer.

One sensible and practical farmer, after successfully using through his harvest a Dorsey machine. remarks—that he would just as soon think of buying a clock without hands to point to the hour of the day as again to try a reaper without a rake to do its own raking. Such is the testimony and universal appreciation of this invaluable improvement upon the reaper wherever it has had an opportunity to establish its superiority.

A MARYLAND FARMER.

L. M. K., an old subscriber from Georgia makes kindly mention in a letter dated July 8th, of the MARYLAND FARMER, thus: "I have been a subscriber to your journal for the last 12 or 15 years and have become very much attached to it. Would not like to give it up, tho' money is very scarce down here and with the present drought, it bids fair soon to be non est."

July 1st, 1879.

Editors of Md. Farmer:—I make a small investment for sheep on poor land in Tide Water, Virginia. The figures below will show what can be done on a larger scale and much more by the experience, of a practical farmer, which I am not. Our poor lands yield readily to manure of any kind and those who look at farming as their prospect for life with a laudable desire to rise, a very small investment in our lands, in a few years will return a handsome reward. Wheat, though badly winter killed, is of good quality though a short crop; corn looking well; clover harvested and very good; oats low, owing to a dry May; fruit abundant,

SHEEP ACCOUNT.	
1376 paid for 8 ewes and 1 buck,	\$34
Expense each \$2 per annum,	78
	\$112 00
CR.	100
By sales of wool and lambs,	\$142 36
1879 net cash profit in 3 years,	30 36
On hand now 15 grown sheep,	52 50
13 lambs,	39 00
This year's clip of wool for sale, say,	25 00
	\$144 86

Note.—The account was kept yearly and the above is the gross amount for 3 years.

DOMESTIC RECIPES.

A REFRESHING BRVERAGE.-Dr. Walker Lewis. in describing the precaution against cholera adopted at the General Post-Office in London, says: "The men employed in sorting letters and newspapers suffer much from thirst, especially in the hot weather, and consequently drink mnch water while engaged in their duties. Although the Post-Office is supplied with excellent water, much diarrhœa was, nevertheless, the result of this practice. To remedy this the officers, clerks and men of all classes have of late been supplied from the medical department with a most agreeable drink, which not only assuages the thirst, but has, moreover, strong anti-septic and anti-diarrhœa properties. It is called orangeade, and is thus composed: Take of dilute sulphuric acid, concentrated infusion of orange peel, each twelve drachms; syrup of orange peel, five fluid ounces. This quantity is added to two gallons of water. A large wineglassful is taken for a draught, mixed with more or less water according to taste. The officers drank this with pleasure. It is being consumed in large quantities daily, and I am convinced it will be the means of warding off a great deal of sickness."

SHERBET.—To six lemons and eight sweet oranges, sliced and their seeds removed, put one gallon of water and sweeten to taste; freeze same as ice cream.

JAM CAKE.—One teacup of butter, two of sugar, three of flour, one of jam, one of butter milk, one teaspoon of soda, one of mace, two of cinnamon,

THE DAIRY.

Rules for making Gilt-Edged Butter.

E. D. Mason, president of the Vermont Dairymen's Association, has furnished the leading agricultural publications of the country with printed slips of the following article, originally published in the Rural New Yorker.

FEEDING.

Select your cows with reference to the quantity and richness of the milk produced. The best cows are the cheapest for butter, so get the best you can of whatever breed you select. Give them good pasturage in the summer, and plenty of pure water, with frequent access to salt. In winter, feed sweet, early-cut hay, well-cured corn fodder, roots, cabbages, etc., and a ration of bran, corn meal, ground oats, or middlings.

IMPLEMENTS.

Have the best implements, and keep them scrupulously clean, well-scalded, and often exposed to the sweetening influences of the sun. The milk pail and pans should be of the best quality of tin. A reliable thermometer is a necessity to every good dairyman.

MILKING.

The milking should be done quietly and at regular times, and the utmost cleanliness observed. Nothing is tainted quicker than milk by foul odors, and surely at times with nearly all cows there is enough animal odor to it without adding any more.

SETTING.

Strain the milk slowly into the pans, four to six inches deep. It is an excellent plan to strain the milk into a large can set in cold water, and cool down to 60 degrees before putting into the small pans. The milk must be set in a pure atmosphere, at such a temperature as will permit the cream to rise in from thirty to thirty-six hours after sitting. In order to do that, the room should be kept at about 60 to 65 degrees, and not allowed to vary much either above or below.

In hot weather keep a large piece of ice in a tub in the room. Cover it over with a thick blanket. and, if arranged so that the water will run off, it will keep a long time, and keep the room very uniform.

In cold weather some arrangement for warming the milk room should be adopted.

SKIMMING.

Skim as soon as the milk begins to turn sour. Do not neglect this rule, as it is impossible to to the butter. Flll within half an inch of the top,

make good butter from cream that has become old and sour. When you pour your cream into the cream jar, splash as little as possible. Stir the cream every time you add more to it, and wipe the sides of the pot. Keep the temperature at about 60 degrees, and the cream pot in the coolest part of the house, covered with a fine gauze netting strained on a hoop, not with a tight cover. If covered too tight, fermentation is often too rapid.

CHURNING.

Churn often, as there is nothing gained by long keeping. Bring the temperature of the cream in the churn to 58 degrees, and not allow it to rise above 64 degrees. Churn early in the morning, while it is cool. First scald the churn, turn the paddles a few times; then pour off, and pour in cold water, and turn the paddles; pour off and pour in your cream. In churning revolve the paddles with an easy regular motion, not too fast nor two slow.

The butter should come in about forty minutes, a little more or a little less if the temperature of the cream when put in was about 58 degrees, ascertained by the thermometer.

COLORING.

When likely to be deficient in color add a sufficient quantity of "The Perfected Butter Color," (made by Wells, Richardson & Co., Burlington, Vt.,) to keep it up to the June standard.

WORKING AND SALTING.

When it has "broken" and there is a difficulty to make the butter gather, throw in some cold water and give a few more turns. Some, I think a majority, of the best butter-makers of to-day wash their butter with cold water before removing from the churn. Gather your butter with the paddle and lift it out into the tray, press it gently and incline it, and let the butter-milk run off. Work it gently with the paddle, with a cutting, gentle pressure, but not to mash it; or, better, put into the butter-worker.

Salt it about an ounce to the pound, or to the taste of good customers; only with the best salt, and free from lumps and coarseness. Work the butter only so much as to expel the butter milk, but not to work it too dry. This can be done by the use of a weak brine prepared for the purpose. Put the bowl away in a cool place. After standing twelve or twenty-four hours, gently press out with a ladle or machine, the remaining butter-milk, and any brine that will flow out with it, care being used not to work it too much. If this is done the butter has lost its grain and becomes salvey and its keeping qualities are greatly injured.

PACKING.

Pack in vessels which will impart no impurities

Place a thin cloth wholly over the butter. Over that pour cold brine as strong as can be made of hot water and the purest salt, or cover with a layer of fine salt. The whole process of making the butter, from drawing the milk to the placing of the butter in packages, should be hurried, as milk, cream and butter are going to decay every moment when exposed to the air, however pure it may be. Such butter is ready to keep or sell. If to be kept long before selling, surround every package with coarse salt, by placing them in boxes prepared for the purpose. This process keeps the butter cool and hard, and free from sudden changes of air.

When all these things are attended to promptly, and with as much uniformity as is under the power of man to control, there will be a near approach to uniformity in color, richness and purity. If the new beginner fo lows these rules, and keeps doing so, he will soon command the highest figures.

Cleanliness and common sense applied from the beginning to the end, are absolutely necessary to insure good butter that will bring the highest price in the market.

THE London Dairymen gives the following directions for making cream-cheese, a variety very popular in England. On the plans given, any villager or farmer's wife, can make the very finest cheese for table use, whenever so inclined. Those not having the cream can buy it: "Take a quart of cream, and, if not desired to be very rich, add thereto one pint of new milk; warm it in hot water till it is about the heat of milk from the cow, add a tablespoonful of rennet; let it stand till thick; then break slightly with a spoon, and place it in the frame in which you have previously put a fine canvas cloth; press it lightly with a weight; let it stand a few hours, then put a finer cloth in the frame, and shift the cheese into it. Sprinkle a little salt over the cloth. It will be fit for use in a day or two: To make a rich cream-cheese without rennet, take any quantity of cream and put it into a wet cloth, tie it up and hang it in a cool place for seven or eight days. Then take it from the cloth and put it into a mould in another cloth, with a weight upon it, for two or three days longer. Turn twice a day, and it will be fit for use.-Farm and Live Stock Journal.

LAND sales in Kent county were made lately, as follows: The real estate of the late James A. Roseberry—the home farm, 185 acres, to Mrs. John T. Skirven, at \$56.25 per acre; the Gale farm, 265 acres, to Mrs James A. Roseberry, \$34.25 per acre; wood lot, 20 acres, to Jas. H. Hossinger, 20.50 per acre; the farm of the late Capt. Geo. H. Wilson, 398 acres, to F. C. T. Wilson, \$25 per acre.

DEVONSHIRE CREAM .- Will you allow a Derbyshire woman to tell your correspondents how to make Devonshire cream? I give the mode which is employed in this country: Strain your milk and leave room enough to move without danger of spilling. In summer let it stand twelve hours, in winter twenty-four hours, in a pantry or place not too hot, but that will not freeze. When it has stood that time place the vessel carefully on the top of the stove, without removing the griddles, and with a rather slow fire. Let it remain till, as we say in Eegland, "it begins to ring" - that is, till there will be a round mark on the surface of the cream the size of the bottom of the pan or vessel used. Then it is done. Remove very carefully to a cool place, and cover with another pan turned over, of the same size, and leave till cold. It can then be skimmed as ordinary cream, but will be very tough, and have the sweet, nutty flavor so much admired. The time taken to scald cream depends on the size of the pan and heat of fire. But the slower the better, and it is always done when the "ring" appears. The covering while cooling is very essential.—Rural Sun.

WHO CAN BEAT HER? Capt. T. H. Malone, of this city, proprietor of the Grange Herd of Jerseys, has a three year old cow in his herd, "Imported Blossom," now with her second calf, that only measures 4 feet 2 inches high from top of her shoulders to the ground; 6 feet 7 inches from top of her head between her horns to root of tail; 5 feet 7 inches around the largest part of her body, and carries an udder that measures, when full of milk in the evening, 4 feet 9 inches in circumference. If any one can beat this big-little cow in measurement we would like to hear from them.—

Ex.

The Nelson county Examiner of Va., says of our July number:—The Maryland Farmer was a little tardy this month. It came in with slightly lagging step, and no wonder, loaded as it is with good things and weighty things. A glance over its table of contents shows us this. But let it come late or early it will be welcome.

We have received the July number of the MARY-LAND FARMER, published by Ezra Whitman, at 141 W. Pratt Street, Baltimore. The FARMER is one of the best agricultural, horticultural and rural journals published, and no farmer can afford to be without it. The price of subscription is only \$1 per annum in advance.— The People's Voice, Reistertown, Md.

THE

MARYLAND FARMER,

A STANDARD MAGAZINE.

DEVOTED TO

Agriculture, Horticulture & Rural Economy.

EZRA WHITMAN,

Editor.

COL. W. W. W. BOWIE, Associate Editor.

141 West Pratt Street BALTIMORE.

BALTIMORE, AUGUST 1, 1879.

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One dollar per annum, in advance.

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OUR TERMS FOR 1879.

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44	60	50	66		4		35	00
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Any person who sends us One Hundred
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1 YOUNG AMERICA CORN AND COB
MILL, • • . . worth \$40 00

For Two Hundred Subscribers, at \$1 00 each, we will give a Two Horse Iron Axle Whitewater Wagon, value \$100 00 These articles we warrant to be first-class.

TO ADVERTISERS

The large circulation of the Maryland Farmer makes it one of the best mediums for advertisers of all classes. Its circulation will be largely increased by our reduction in the Subscription Price, and hence add to its advantages as a medium for advertisers. The terms of advertising will remain as heretofore.

The Maryland Farmer will be read this year by more Farmers, Planters, Merchants, Mechanics and others interested in Agriculture, than any other magazine which circulates in the Middle or Southern States, and therefore is the best medium for advertisers who desire to extend their sales in this territory.

We call attention to our Reduction in Price of Subscription.

Read in the advertisements for this month our 13 Reasons Why every Farmer should Subscribe for, and every Business Man Advertise in the Maryland Farmer.

D'R. KENDALL'S valuable little book on the horse and his diseases, can be had at our office or sent by mail on payment of 25 cents.

GRAPE GROWING, ON THE SINGLE POLE SYSTEM, OR HOW THEY ARE CULTIVATED ON THE UPPER RHINE VALLEY, by A. H. Hofer. A treatise every grape grower should have. Price 50 cents, at our office or sent by mail postage paid.

Our friends can do us a good turn by mentioning the MARYLAND FARMER to their neighbors, and suggesting to them to subscribe for it.

Young Men!

It is an easy way to make money by getting subscribers for The MARYLAND FARMER. Send to cents for Specimen Copies, and ascertain what Liberal Commissions we will allow,

TO OUR SUBSCRIBERS!

The reading matter in the MARYLAND FARMER will never be lessened by advertisements. We feel called upon to make this statement, as the large increasing circulation of our paper naturally increases the amount of advertisements, therefore we wish to say most positively to our subscribers, that the reading matter in the FARMER will always contain not less than 32 full pages monthly, and often 36 to 38; and should our advertisements reach 100 pages, it will not lessen the reading matter, but likely to increase it. We feel indebted to our correspondents for their largely increased interest in the FARMER, and we are sincerely thankful for the promptness of our subscribers in renewing their subscriptions since the commencement of the year 1879.

To such as are Delinquent.

In our July issue we gave an earnest yet gentle reminder to such of our subscribers as have let their accounts stand unsettled for over two or more years, that it was important to us to have what was due us, and that it had become imperative on us to request prompt payment of all arrears, especially since the great reduction in our price of subscription; and we endeavored to show that it would be to the interest of all concerned to pay in advance. We enclosed bills to each subscriber in his copy of the MARYLAND FARMER. If, by chance, we overlooked any one, we must beg pardon, as the error was unintentional, because we desire to treat every person with equal curtesy and respect. We return thanks for the kind responses we have received, and hope now that harvest is over we shall hear from those who have failed to respond. If our old friends will rally generously with the many new ones, that are coming in monthly, we shall be all the better able to sustain the continued improvement in our Journal, which is seen and kindly acknowledged by our exchanges, and recognized by all who have an opportunity to examine it.

Delaware State Fair.—The second annual meeting of the Delaware Agricultural Society, will take place at Fairview Park, Dover, commencing Monday, September 2, and continuing one week. The premium list aggregates \$8,000 and competition is open to the world. The railroads have made liberal arrangements for exhibitors and others who may wish to attend.

The Wheat Crop of '79.

We clip from some of our esteemed exchanges. notices of great yields of wheat per acre in different parts of the State. With so very unfavorable a winter as the past was for this grain, it would not be a miss to attribute these large yields to the improvement in farming, which is undoubtedly going on in our State. If accounts from Europe be true, and we have no reason to doubt, the demand abroad will be greater than ever known for American Grain, hence, our farmers should be cautious how they bargain for their wheat. France will have no wheat to export, but will require more than she ever before imported. England will require more than her usual foreign supply, while Russia, it is believed can not furnish but one half the amount annually exported. The prospect for fair prices for wheat this year is at present very flattering to our wheat growers.

The Chestertown Transcript says:—A gentleman residing near Chestertown, raised, this season, on a small fallow field, thirty-eight bushels of prime red wheat to the acre. One acre of the field yielded forty-two bushels, from a sowing of one bushel and a peck and one-eighth. His entire crop, in round numbers, amounts to 2,125 bushels, nearly all of which, we learn, has already been shipped to market. The gentleman spoken of is one of the most thorough-going and successful farmers in the county, although he has but recently given his attention to agricultural pursuits. He believes in the liberal use of phosphates in addition to the natural resources of the farm.

And the same Journal states that Capt, Andrew Woodall, near Georgetown in that county, harvested one hundred acres of wheat which averaged 27 bushels per acre.

The Upper Marlboro' Gazette, Prince George's county, Md., thus speaks of the wheat crop in Maryland:

"The wheat crop in Maryland has been safely harvested, and from the reports of the same which we find in our exchanges, it would appear that it has been the largest for several years past. On the Eastern Shore, and in this section of the State, the stand was not heavy, but a favorable season caused the heads to be well filled. In the counties of Western Maryland the wheat wintered well, and as a consequence a very fine crop has been harvested, both as regards quality and quantity. Very few of the farmers in this county have finished threshing, but those who have, report a fair yield. The best yield so far reported to us was that of Hon. William B. Hill, who last week

threshed 910 bushels from 25 bushels, seeded on one of his fallow fields, or over 35 bushels to the acre."

The Baltimore Sun speaks of a curiosity in wheat.—Mr. Wm. A. Simpson exhibited on 'change some sample stalks of the new "Centennial black-bearded wheat," grown on the country place of Hamilton Easter. Esq., Baltimore county, which were quite a curiosity. The stalks were fully six feet high, and the yield, it is estimated, will be fully 60 bushels to the acre. The wheat is for seed.

State Fairs.

American Institute, New York, Sept 17 to Nov 22 American Pom. Soc., Rochester, Sept. 17 to 19. Capital State (Texas), Austin, Oct. 28 to Nov. 1. Central Ohio, Mechanicsburg, September 2 to 5. Connecticut, Hartford, Oct. 14 to 17. Delaware, Dover, September 22 to 28. Fat Stock, Chicago, November 10 to 15. Georgia, Macon, Oct. 27 to Nov. 1. Illinois, Springfield, Sept. 29 to Oct. 4. Indiana, Indianapolis, Sept. 29 to Oct. 4. Iowa, Des Moines, Sept. 1 to 5. Michigan, Detroit, Sept. 15 to 19. New Jersey, Waverly, Sept 15 to 20. New York, Utica, Sept. 8 to 12. Northern Ohio, Cleveland, Sept. 1 to 5. Northern Kentucky, Florence, Aug. 26 to 30. New England, Worcester, Sept. 2 to 6. North Carolina, Raleigh, Oct. 13 to 18. North Georgia, Atlanta, Oct. 20 to 25. Ohio, Columbus, Aug. 25 to 29. Pennsylvania, Philadelphia, Sept. 8 to 20. Rhode Island, Cranston, Sept. 9 to 11, St. Louis, St. Louis, Oct. 5 to 11. Southern Ohio, Dayton, Sept. 22 to 26. Southern Kentucky, Glasgow, Oct. 7 to 10. South Carolina, Columbia, Nov. 11 to 14. Virginia, Richmond, Oet. 28 to 31.

COUNTY FAIRS IN MARYLAND.

There will be no Maryland State Fair held at Pimlico this year.

Alleghany, Cumberland, Oct. 7 to 10.

Baltimore Co., Cockeysville, Sept. 9 to 12.

Frederick, Frederick,

Dorchester, Cambridge, Sept. 30 to Oct. 3.

Montgomery, Rockville, Sept. 4 to 5.

Kent, Chestertown, Sept. 16 to 18.

We hope to have the list in full in our September number, and we hope the officers of each Society, which will hold a fair this year, will inform us at an early day, of the time and place of meeting, and the amount of premiums, &c.

For the Maryland Farmer,

Corn-Cobs for Whiskey.

DULANY'S VALLEY, BALTIMORE COUNTY, MD.

Messrs. Editors:—While reading in your last
number an account of the experiment of Dr.
Nichols to ascertain the nutritive qualities of corncobs, I was reminded of an experiment mentioned
to me by Col. Baker Johnson, then (1826 or 1828)
a resident of our valley, and who had previously
been largely engaged in distilling and furnace
operations in Frederick county, in this State, together with farming, &c., I believe he was an uncle
of Genl. Bradly T. Johnson, of confederate notori-

Col. J. said that he had on one, or perhaps more occasions, caused equal quantities of cobs and corn by weight to be distilled separately, and found the products in whisky about equal.

As I have never known of any similar experiment, being made public, I have thought it might be of interest to some of your readers, and so place it at your disposal.

JULY 17th, 1879. JERH. YELLOTT.

[The above is from a respected old subscriber and well worthy the attention of our readers. Corn cobs, by most people, have been thought to be worthless, while a few, ourselves among the latter, have placed a value of no small amount upon them. Hence, we are glad to see that both science and practice have demonstrated that they are of value and should be utilized, if in no other way, than in being ground with the grain for feeding stock. We thank our friend for the new fact he gives about the virtues of corn cobs as an animating beverage.—Eds. Md. Far. J

SHEEF FOR LIVERPOOL.—The British steamship Australian, Capt. Peters, cleared at Baltimore, July 7th, with 1,200 head of live sheep, sent out by McDonald, Marsh & Darlington, of Chicago. The sheep averaged almost 140 pounds, and are an especially fine lot. They were put on deck, 25 in a pen, and 5 men go out to take care of them. The Australian had a shipment of new Southern wheat, besides general merchandise.

WE learn that the expenses of the last New York Horticultural Society were \$800. The receipts were \$400. If the florists and horticulturists would think a little more of "the advancement of horticulture," that they talk so much about in their essays, and less of "the advancement" of their business, we might hope that the outside horticultural public would show a livelier interest in their exhibitions,

For the Maryland Farmer.

Pleuro Pneumonia.

The leading article in the July number of the MARYLAND FARMER, in reference to Pleuro Pneumonia, calls the attention of our farming community to a question of vital importance, to that great interest of our country, namely: the raising and feeding of cattle for home consumption and exportation, and, which is destined to be one of the principal elements of our national prosperity.

The correspondence published between the Governor of Maryland, through the Secretary of State, and the authorities of the New York State Agricultural Society, evinces the deep solicitude felt by the farmers of New York, that prefer legislative enactments shall be made by the State legislatures for the effectual prevention, as far as possible, of the disease being engendered, and, when it does exist, to guard against its dissemination. It is gratifying to find that his Excellency the Governor of Maryland, is fully aware of the necessity of our State taking action in the matter at the next meeting of the legislature.

In your very appropriate remarks introducing this correspondence to your readers, Messrs. Editors, you are pleased to say: "Maryland is derelict in its duty in having no energetic enactments on this subject on her statutes. But unfortunately all that which is calculated to advance and protect the interests of her husbandmen, seems to be lost sight of by her legislators, even in despite of the suggestions of the Governors in their messages for years."

Now, permit me, to respectfully say that you have fallen into an unintentional error in making the above remarks. Maryland has not been altogether derelict. If you will turn to 406 of senate journal, session of 1868, you will find, on the motion of the writer of this, leave was granted to the Committee on Agriculture to introduce a bill to prevent the spread of the disease known as "Pleuro Pneumonia," said to be existing at present among cattle in different sections of the State. And on page 424 you will find that the writer reported from the Committee on Agriculture, senate hill, entitled, "an act to prevent the spread of Pleuro Pneumonia, and other contagious diseases existing among cattle in the State." And, again, on page 520 you will find this bill passed with but one dissenting voice.

From this, you will perceive, that some at least, of Maryland's legislators have not been unmindful of the interests of her husbandmen.

The bill was sent to the House of Delegates, where it was lost, owing, it was said, to the active

exertions of a member from a county adjacent to the city of Baltimore, who numbered among his constituents proprietors of milk dairies, who either had cattle which were diseased, or which might become diseased, and in either case, the provisions of the bill would necessarily interfere with their immediate interests.

This subject is of great moment to one of the most important interests in our agricultural economy, and should not be allowed to sleep.

COLONUS.

[We welcome back to our columns our whilem correspondent whose pleasant and sensible communications often have gratified our readers. But we do not plead guilty to his charge that we have done injustice to Maryland legislators. We did not wish to make distinctions, and single out our friend "Colonus" and a few others, who, as far back as 1868, made an effort but failed to secure a law to protect the cattle of the State from this scourge. We candidly had forgotten it, having been so long ago; but during the eleven years that have elapsed, has there been even a motion made on the subject? "Colonus" must himself have become indifferent to the subject, or he, having held a high place in the representative bodies of the State since his first and last effort. would have renewed his efforts if there seemed a chance for success. "Colonus" is a true and tried friend of agriculture, and we trust to him and others like him to shape the legislation of the State in future, so as to favor, rather than oppress. the farming interests.

DESTROY THE YELLOW BUTTERFLIES .- These beautiful little insects lay innumerable eggs this month on cabbage leaves, and as stated elsewhere soon become voracious worms, that destroy the cabbage crop. Mr. R. K., of Easton, stated to us lately, that last year he saved his own cabbage and that of others in his vicinity, by offering a reward of one cent for every butterfly brought to him. In a short time he had expended over six dollars. This effectually prevented the production of millions of worms and saved hundreds of dollars worth of cabbage. We highly commend his enterprise. Let every grower of cabbage "go and do likewise," and the cabbage plague will disappear. Every Tobacco plant grower should pursue the same ruthless policy and in two years the tobacco worm will become unknown.

Petitions have been received by both branches of the Michigan Legislature for the admission of girls to the Agricultural College on equal footing with the boys, and to make women eligible as school officers.

History of the Maryland Agricultural and Mechanical Association.

CHAPTER XII.

This Society held on the 25th, 26th, 27th and 28th of October, 1853, its sixth annual fair on the grounds of the association, on Charles Street, Baltimore city. Taking it all and all this was perhaps the most important and successful Fair it ever held during its organization. It seemed to be a turning point in its hitherto glorious career.

The weather proved very unfavorable on Monday, the day before the opening of the meeting the elements were at war. It was a horrid day, cold, rain and snow alternately and sometimes both tegether, altogether a terrible storm from early morn till night. A great deal of stock was thereby delayed on the road. The time for making entries was extended to the next day and the examining committees had their duties put off until Wednesday, the usual day for admitting the public. The weather continued to be very unpleasant for two or three days, and it was thought that the attendance would be very slim. But notwithstanding the inclemency of the weather, the Society was agreeably disappointed in the attendence of visitors. The crowd was immense, and there was no falling off in the amount of stock and other articles for exhibition in all the different classes.

The exhibition showed a great improvement in the show of horses and stock generally. There was a large increase in the number of Holstein cattle which showed that a deeper interest than ever before was enlisted in this breed of cattle. They excelled at this meeting in numbers the Jerseys and Alderneys. To-day there would be 10 of the latter to one of the former at any fair held in Maryland. Such is the power of fashion even with stock breeders. The Durhams, Devons, Ayrshires and Holsteins were the most popular breeds in the order named. Now, they will stand, in our opinion, in this State, about in the following order. Jerseys and Alderneys, Herefords, Short-horns, Devon and Ayrshire. There are only a few Holsteins in the State at the present writing.

The display of hogs was excellent, but confined chiefly to the Chester, Berkshire and China. Other breeds so popular nowadays were then unknown in this country.

The poultry show was immense in number and very superior.

There was a very fine assortment of slaughtered fat mutton shown by several distinguished breeders of improved sheep. We question whether such could now be produced in Maryland and Virginia or in Delaware. Here we are reminded that in February of that year, 1853, Mr. Reybold slaughtered a wether in Philadelphia market whose live weight was 374 lbs., and dressed or dead weight was 264½ lbs.

At this exhibition Mr. Lurman and Mr. Hewlett each had a very large display of vegetables of best quality and embracing specimens of nearly every class or kind that can be grown in this climate.

The display of agricultural implements was as usual very large and highly attractive. There were a great number of exhibitors. Messrs. Sinclair had a large and elegant castellated building, highly decorated, to which he gave the name of "Castle Calvert." Mr. Whitman had an extensive building of handsome appearance, measuring 100 feet in length, including the wings. These buildings were crowded with a great variety of machinery and implements. Before Mr. Whitman's structure stood a portable steam engine for farm purposes. This attracted great attention at that time when the application of steam to farm purposes was but little known and appreciated.

The plowing match was a failure, like every one we have ever seen at any fair except in New England, although it should be one of the most striking and practically instuctive features of any and every agricultural exhibition. It was lauded at the time by those who never handled a plow in their lives and had not the gumption to know good plowing from bad, or the great difference in the construction of plows as to their draft or adaptation to particular work. But the great feature of this interesting meeting was the eloquent, instructive and practical oration on the last day of the exhibition, by C. P. Holcomb. of Delaware. Mr. H. was a gentleman of that old school of manners which won him friends whereever he went; highly educated and naturally gifted-a man of travel and a deep lover of nature as well as a thorough student of agriculture, he could never fail in enlisting the feelings and absorbing the attention of an auditory composed of intelligent tillers of the soil. He had great experience in stock breeding and took delight in horticulture. He died in the dawn of his usefu'ness, for he was but setting out on a glorious career when called, we are sure, to reap a richer harvest than the fields of earth can produce,

The evening meetings of the Society were on this occasion of unusual interest, and we give the more important proceedings of the meeting on the first evening, Monday, 24th of October, 1853, taken from a well digested report of the same in the American Farmer of December, 1853, pages 169 and 170:

The President presented the following communication from F. P. Blair, Esq on the subject of a National Agricultural School and Experimental Farm, which was laid on the table for future consideration:—

SILVER SPRING, October 1, 1853.

Charles B. Calvert, Esq.-

Dear Sir:—In the address written by me for the Montgomery Co. Agricultural Fair, I have ventured to bring forward Washington's recommendation of a National Board of Agriculture, on the plan of that in Great Britain. The friends of Agriculture in this country seem now to be alive to Washington's wish, to found a similar system here. In France, as well as in England, these National Boards of Agriculture are scientific establishments, with which are associated Model or Experimental Farms. The Farm is intended to test the scientific truths taught by experiment, and to teach the skill necessary to perfect theory by practice. The scholars on those farms go through the discipline of husbandry, as the West Point Cadets do the military discipline of that Academy.

This mode of teaching husbandry abroad is the great reliance for uniting science and skill in it, and giving a new impulse to its advancement. I hope therefore, you will consider it worthy of being brought before your Association at Baltimore, and make a State movement for a National School.

Nothing can be done in Congress towards this object, unless it be done through the Smithson Institute, which Congress has undertaken to administer as a trust "for the diffusion of knowledge among men." "The Savans," (as they call themselves), who have now got the enjoyment of this fund, and the possession of the Edifice and Apparatus, mean to convert the whole into a scientific and philosphic curiosity shop, and a lounge for literary gentlemen of leisure. In their reply to my address, in an article in the "Union," published under the editorial head, while they seem to condemn my suggestions, they in effect admit that Agriculture comes within the scope of their trust, as a part of that knowledge which they are bound to diffuse. They say they have already done much in this way, and would do more if they had the means. Well, if the \$100,000 annually appropriated by Congress for the trash of the Patent Office Report, were appropriated to establish a Model Farm, and pay a Superintendent, and Smithson professors were required to lecture and experiment, with a view to educate agricultural scholars, they would have the means, and would really be compelled to do something to diffuse the best knowledge among men, next to that which is to profit them immortally.

The Model Farm ought to be on the Baltimore Railroad, so as to be seen by every body, and within an half hour of the National Institute in the city.

Your most obedient servant,

F. P. BLAIR.

The following resolution, offered by Mr. J. T. Earle, was unanimously adopted.

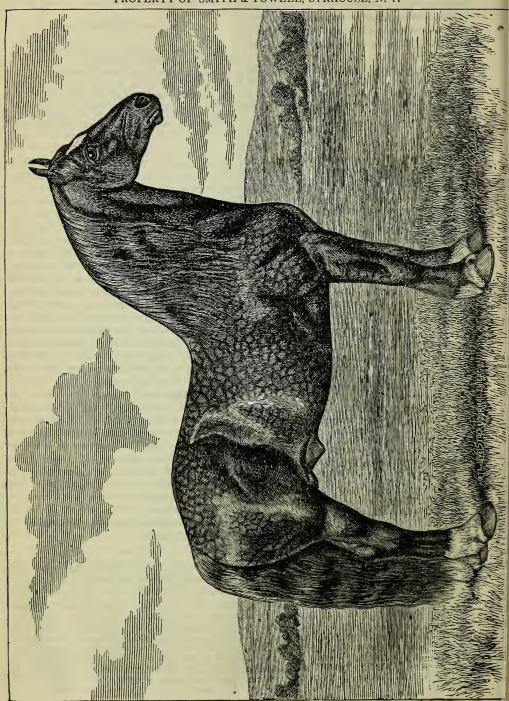
Resolved, That a Committee of five be appointed by the Chair, whose duty it shall be to ask of the Congress of the United States, that the views expressed in the letter of F. P. Blair, in reference to the establishment of an Experimental Farm, receive such action as Congress may deem most conducive to Agricultural interests.

GEN. GILBERT S. MEEM'S ANNUAL STOCK SALE will take place at Strathmoor, near Mt. Jackson Shenandoah county Va., 20th of this month. A private letter to us from the General, says, that there will be offered 70 Southdown and 30 Cotswold bucks; fifty ewes of each breed, all pure bred sheep from the flocks of the Clays and other distinguished Kentucky breeders. He will also offer 75 high grade Cotswold ewes and ewe lambs of his own raising. He has reason for believing that a much larger number of visitors will be present this year than at the last sale. Last year was his first essay in this "new departure" in old Virginia stock breeding. We were present, and gratified to see the large crowd of gentlemen from Virginia and Maryland, and the interest they manifested in the enterprise of our liberal and hospitable host of Strathmoor.

It is expected that at this sale there will be offered some 20 or 30 head of young H. B. Kentucky Short-horns of both sexes. Such animal sales are calculated to do great good in disseminating a large number of pure-bred animals for breeding, in the surrounding region, which perhaps would never be introduced, unless, in exceptional cases, but for these sales which attract gentlemen from long distances, to meet old and new friends, exchange opinions and purchase a new infusion of blood for their flocks and herds. We wish the enterprise great success.

Tomatoes.— The American Grocer estimates from carefully selected statistics that the number of packages of tomatoes put up in the United States last year reached the great total of 19,668,000 —Maryland leading off with 6,840,000; New Jorsey 5,592,000; Delaware 1,884,000; New York 1,680,000; Massachusetts 960,000; Pennsylvania 192,000; Pacific Coast 1,200,000; Western and other States 1,320,000. The value of this industry to the trade is given at \$1,600,000. Yet many of the present generation can recall the time when the tomato was regarded as only a curiosity,

Imported Clydesdale Stallion "DONSIDE CHAMPION" PROPERTY OF SMITH & POWELL, SYRACUSE, N. Y.



Live Stock Register.

Clydesdale Horses.

The rapidly growing interest in and demand for this noted breed of draft horses in this country attaches to them for the breeder more than ordinary interest.

The attention of breeders in this country has been turned too much to speed, while our draft and business horses have been decidedly neglected. No other branch of our stock interest has, until recently, received so little attention. In no other department have our breeders missed such golden opportunities. In comparison with England, Scotland, France or any of the great European countries, or even our neighbor-Canadaour draft horses are shamefully deficient. Even our newer Western States have taken long strides in advance of their older sisters of the East. It is with extreme difficulty that a really superior draft horse can be found in our markets, unless brought by a recent shipment from the West, where some imported draft stallion has been located for a sufficient length of time to have left his impress on the horses of the surrounding country, Every buyer and dealer knows how readily and at what paying figures such horses are picked up in the market, and yet our whole surrounding country is over stocked with horses too light and too slender for draft purposes. If the surplus horse stock of Virginia, alone, were of the Clydesdale blood all could be readily sold in this market at largely paying figures, and add millions to the wealth of that great State. Not only is there a large demand for this class of horses in the markets of this country, but there is also a large foreign demand of which the breeders of this country can, with profit, avail themselves. Some time since the Spirit of the Times published a letter from Capt.W. A. Kerr, dated "Office British Empire Horse Supply Association, London," in which he says, speaking of the horse markets of that country, "Breed us true Clydesdale and we will take them in any number."

We think our people are beginning to realize the importance of a change in this respect, and just now as public attention is being turned in this direction, we are very glad to be able, through the kindness of Messrs. Smith & Powell, of Syracuse, N. Y.. to furnish our readers with a beautiful cut of a superior specimen of the Clydesdale breed. This cut was made from a photograph which we have seen and can assure our readars of its ac-

curacy and truthfulness. This elegant stallion, "Donside Champion," is of the pure Clydesdale breed, having been bred in Scotland from such noted stock as "Sir Colin," "Old Prince Royal," &c. He is now owned by Messrs. Smith & Powell, and stands at the head of the Clydesdale department of their noted breeding establishment. He is dark dapple bay, stands 16% hands and will weigh about 1000 lbs. These gentlemen are among the largest importers and breeders of Clydesdale horses in this country. They are also very large breeders of the Hambletonian horses for road and trotting purposes. Their idea is that first-class road and draft horses cannot be successfully combined in the same breed. The requirements of the two are entirely different. Each has his proper place—his appropriate sphere. This firm are also the owners of one of the most noted herds of Holstein cattle in this country. They do their own importing. One of the firm is now in Holland selecting a large importation of Holsteins and will return via Scotland and select some choice Clydesdale Stallions.

We hope the day is not far distant when these noted and beautiful draft horses will be more generally introduced into our country. We hope the breeders of Maryland and Virginia will look to their own interests in this respect.

These horses possess many desirable and valuable qualities. They are large, powerfully made in all respects, long, round, straight, stylish, with broad, flat, hard, bony limbs, excellent feet, and are free, easy travelers. They step square and straight, with good knee action, neither paddling in front or waddling behind, and are unusually rapid walkers. They are hardy, healthy, vigorous, easily kept and work almost from instinct. So easily are they broken to the harness that it seldom requires more than a single day before they can with safety be put into the regular team. The early age at which they sufficiently mature to be able to commence work seems almost incredible. At two years of age they will frequently do the ordinary work of the farm, and at three years are ready for heavy business.

The superiority of the 'Half Bloods' produced by crossing Clydesdale stallions on our American dams is a matter of vast importance to the ordinary breeder. Such grades are usually 15\(^2_4\) to 16\(^1_4\) hands, weighing 1250 lbs., with fine style, round and smooth, with excellent limbs and feet. They are fine roadsters, and are of the very best stamp for all kinds of business. They very successfully combine size, strength, style and action.

Horse Delusion.

Gradually it begins to get in to the mind of the average farmer that raising trotting horses doesn't pay-at least for him. It may pay somebody, but that somebody is not himself. 'Tis true the papers say that "Joker" has been sold for a thousand or more; but young "Dexter," now five years old, that has a very "promising gait," and has never earned a cent, for he was too valuable to work, has not been sold. "The price for such a colt is low-not a bagatelle of his true worth. Such a stepper as he, is worth \$500. Why people ought to snap at him at that figure." "He will go one of these days, when a man comes along who can appreciate him." Why, I should not be surprised if he brought several thousands yet. See what Bonner pays, and this colt is a grandson of 'Hambletonian."

And so the delusion is kept up until young "Dexter" "eats himself up" several times, and the skeleton buggy is worn out, and then in despair and disgust the owner sells him for \$125-all he is worth-and the trotter goes into the horse market and wears out before some light wagon or perhaps a street car.

Not one "promising colt" of trotting stock in twenty five is ever worth any more than the average value for horses designed for drudges before light carts and trucks and street cars. Here they are really unfitted for the work required of them, as they are generally too light in bone and muscle and consequently break down early. The time spent in fussing over trotting colts by the time they are five years old, and in training them, is worth all they will average in price when sold, take the country through. Such a colt must not work, as it would spoil its gait and spirit; so it does not earn anything, and grows up a dead loss and leaves the breeder in debt. The account might be made up in this way:

YOUNG DEXTER	Dr.	
To use of sire	\$25 00	
To keeping dam one year without work	30 00	
To wintering first winter	15 00	
To keeping second year, hay and oats	40 00	
To keeping third year, hay and oats	40 00	
To keeping fourth year, hay and oats	40 00	
To keeping fifth year, hay and oats	40 00	
To skeleton buggy or sulky	73 00	
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If a colt had been raised large enough for a carriage or cart horse, or to be used on a heavy and are in constant and permanent demand - at \$5,000 for military display.

three years of age it might have been put to work and earned its keeping, and, when five years old, it would bring from \$200 to \$300, according to its style and size. These are the colts for farmers to raise, especially in the Eastern States. They will always bring a paying price, for they are good for farm work or any sort of service. They must be not less than sixteen hands high, with as much natural style and action as possible. It is not necessary that they should be "trotters," but they should be good easy travelers. Let the breeding of trotting horses be confined to the large breeding farms, where the business is systemized and expert trainers can handle them; and then a large proportion of the demoralization connected with fast horses, and much of the damage to farmers in trying to breed and train them, may be avoided .-- Col. F. D. Curtiss. in Rural New Yorker.

Shearing Lambs.

We would remind our readers of the importance of shearing their lambs. This practice has been followed several years past by some of the best flock masters in the State, and they have invariably pronounced it beneficial. We have known of several instances where the lambs were dying from some unknown cause; various remedies were tried without avail, and finally their woolly coats were taken off, when at once they began to improve. Not only does it benefit the sheep, but the proceeds of the sale of the wool will go a great way towards paying harvest hands. By all means clip the lambs before the hot days of July are upon us.—Rural Sun.

WILL GREEN RYE PRODUCE ABORTION? - The Rural Sun is of "the opinion that it has a tendency to cause abortion in sheep and cows." We beg leave to differ. We have grazed sheep and cows for years on young rye and never had a cow or ewe to abort when grazing on it for weeks. Would be glad to hear from those who have had experience in this matter, as it is an important matter, and if we are wrong, we shall abandon one of our favorite theories in successful pasturing cows and sheep in early winter and spring.-Eds. Md. Far.

The St. Louis fair will be held at St. Louis, Mo., \$305 00 October 5-11. The managers seem determined to keep far ahead of other Expositions of American agriculture and industries in the Union, by truck-which kind of horses have a fixed value offering \$50,000 in premiums and appropriating

Maryland the Home for Immigrants—Its Advantages and Resources.

CALVERT COUNTY

We take this old county, formed 1654, and named in honor of the family to which Lord Baltimore belonged, for our subject in this chapter of what we design to be a brief sketch of each county in the State, describing its peculiar local advantages to persons who wish to settle in Maryland, with a view to establish factories, enter upon remunerative industries, raise stock, or other agricultural pursuits requiring capital, or to those who have small means, but energy and industry, who desire to own small farms and make a comfortable living out of the lands. To all such there is no place like old Maryland, that will return so much gain and comfort for so small an outlay.

Calvert county is a most striking illustration of the fact that large portions of Maryland are surely unknown to the outside world, or such pleasant places would not go unsought as homesteads. It shows a total want of enterprise or a jealous guarding of their secluded contentment on the part of its citizens, a sort of selfishness to enjoy their own, among themselves, not wishing to share with strangers the many blessings that a kind Providence has showered over their little peninsular. Yet, there is not in the wide world a more generous, hospitable people than the residents of this highly favored little county—the smallest in territory and population in the State. Owing to the indifference to notoriety alluded to above, this county has not increased within the last 30 years, keeping up her numbers full, but remaining stationary; her population in 1850 was 9,646, and is now estimated at only 10,000.

This county has an area of only 250 square miles, in the form of a wedge,—a long peninsular whose shores are washed by the Patuxent River and the Chesapeake Bay; its interior well watered by streams emptying into these waters. The surface is rolling, the lands good, some very fertile, and almost every where rich marl deposits to in prove the poorer portions. There is plenty of timber and wood for fuel; with a healthy climate. The waters abound in all the delicacies of fish, oysters, terrapins, crabs, clams, wild fowl, and hardly a household in the county that is not sufficiently near to enjoy any of these daily, for the mere trouble of a few miles ride and the taking of them. Great numbers of farms bound upon these prolific waters. The lands are especially adapted to the growth of fine tobacco, corn, and fruits, and early

yield well. There are no lands in the State that are easier or more susceptible of improvement than Calvert county lands.

We are never wedded so much to ourselves as to clothe in our own language even what we know of our own knowledge, when we can find, what we can vouch for, better said by others, hence, we avail ourselves of the following extract from the Fifth Report of Dr. James Higgins, State Chemist, to the Legislature of Maryland 1856.

"The soil is entirely alluvial in every part, in some places naturally very fertile, and nearly every where capable of a high degree of improvement, by attentive cultivation and proper manuring; it is generally light, with no impervious strata lying near the surface, is easily cultivated and responds very readily to proper improvement. It has received but little aid from manures, and in many instances its cultivation has been much neglected, yet some of the best lands, some of the best farms and plantations, and some of the most intelligent practical farmers and planters in the state may be found in Calvert county. Its natural advantages of location as to a cheap conveyance to market, and its natural resources for improvement are very great, and the waters which nearly encompass it, furnish all the means and appliances for the luxuries of good living. The county is already healthy, and can be much more so by proper attention paid to draining and the cultivation of its soils. Its inhabitants have ever been famous for their unbounded hospitality.

"The land in this county is very cheap, and I have known sales made of farms here at a rate one-fourth of that which even inferior land has brought in other parts of the state, with inferior advantages as to transportation and con-venience to market. To men with small capital, but few places offer better inducements for investing it, but few places any where can be found where strangers would meet with a more cordial welcome, or sooner find themselves "at home." The soils of this county shall only be described as far as their varieties have been examined. We have in the upper part of this county, in the neighborhood of Smithsville, those rich alluvial soils which I described in a former report, under the name of "West River Soils," which are found with some slight modifications, (depending on culture and the rotation of crops), in various parts of the county, and also on the Pataxent border. This scil even in its poorest condition can be improved to a very great extent solely by the addition of of plaster and clover. It has fine texture, and belongs to the class of sandy loams, as their coarse quartz sand and gravel in almost every case exceed fifty per cent. There are hundreds of instances where these lands have been increased ten fold in productiveness by the sole application of one or two bushels of plaster per acre.

Great numbers of farms bound upon these prolific waters. The lands are especially adapted to the growth of fine tobacco, corn, and fruits, and early vegetables. The small grains, wheat, rye, oats, &c.,

These knolls are always less loamy than the more level parts of the field, and are of a much deeper color. A specimen of them was sent to me by Mr. Alexander Somerville of Pt. Patience, and from his practical information and my own examination, I have deduced the following rules as to their improvement:

"First, they should not be manured with finely rotted stable manure, nor with lime, but should be treated with coarse stable or barn-yard manure plowed in, or with the siftings from shell banks, or with compost manure from marshes or ditch banks. These applications will give a good texture to these places and supply them with all the necessary nutrient substances. A very full and complete report on them was given to the gentleman by whom they were sent, and I am only consoled in not having it to publish, by the knowledge that full information on this subject will be imparted to those who seek it from him.

"RESOURCES FOR IMPROVEMENT.—There is no county in the State that has so much means for the improvement of its soils, and perhaps none that has made generally so little use of them as Calvert county.

"These natural resources are the very things which the soils most need to supply them with nutrient subtances and improve their mechanical texture, viz: calcareous manures in the form of "Indian shell banks," which exist in various parts of the county, on the Patuxent border, and marls, of the variety of either clayey or sandy shell marls. Besides this, the river and the bay can furnish an illimitable amount of oyster shells that can easily be burnt into lime.

"In my previous Reports, the mode of using these Indian shell banks has been very fully described, and those who have used them fully endorse their value. The coarse mould "sifting" which is separated from them in the process of screening, as an application for wheat, or corn, equals a heavy dressing of Peruvian guano, in the first, and lasts through many years.

"The lime burnt from these shells is equal to the best fresh oyster shell lime, and peculiarly appropriate to all of the white oak lands, and those which contain a surplus proportion of magnesia.

"The shell mould, now lying inactive and unused in the banks of Calvert county, is sufficient to produce, clear of all expenses attending its application, more money than is sufficient to pay all the expenses of the civil list of the county. But this is not its only resources for agricultural improvement. The quantity and extent of its marls, adapted in an especial manner to meet all deficiencies in its soils, would seem fabulous to one unacquainted with their quantity. There is on the bay shore a marl bank of easy access showing a clear depth of about twelve feet and extending miles in length. A part of this marl is sandy marl, and particularly adapted to the stiff soils adjacent to it, another part is very stiff clay marl, and exactly suitable to the light soils in this vicinity. Not only are these marls found on the bay shore, but in many and various other parts of the county from the Anne Arundel border down to St. Leonard's Creek. They contain from thirty to eighty per cent. of carbonate of lime, (air-slacked lime,) and would, if

applied, double the value of lands on which they might be used, and pay for the expense of their application in the first crop. I say this from a very extensive acquaintance with the effects of the marl, and this opinion is founded on more practical observation than has been attained by any one else in Maryland,"

These are words of wisdom from a noble gentleman, who was an enthusiastic devotee to science, indefatigable in his efforts to impart useful information to his fellow farmers. He was a careful analytical chemist, who either himself (or had some reliable person to do so) practically tested his theories, based on his analyses. He died too early in life to enjoy the pleasure of having his labors fully and appreciatingly acknowledged. What we have quoted, as written by so learned an agricultural chemist nearly a quarter of a century ago, may be strictly relied on as true, by all who are enquirers as to the real value of the lands in Southern Maryland, and whose suggestions should be no longer neglected by those who possess these soils, but should immediately avail themselves of the light he has shed upon the method by which they can easily and inexpensively recuperate their wornout soils. To his suggestions we would add, increase your stock of all sorts, grow grass and raise stock; "the more grass the more stock, and the more stock the more manure," and the more manure the more will be the fertility of the soil.

Higgins wrote 23 years ago, and we find in the July 12th, 1879, issue of our valued exchange, the Calvert Journal, published in Prince Frederick, the county town of Calvert county, the following well written and timely editorial, in full rapport with what we are so solicitously laboring for:

"Being easy of access by water to Baltimore city, and its fartherest point only about seventy-five miles from that city, and its lands being remarkably low in price, Calvert should in our opinion, be more highly appreciated abroad.

In-some particulars it is very remarkable. It has a population of about 10,000, and although it has no almshouse, yet it only requires an annual levy of about \$1,200 to provide for its paupers. It has an assessable basis of about \$2,000,000, yet the annual county taxes (including school taxes) average only from between 70 and 80 cents in each \$100. Being the smallest county in the State, the rate of taxation might reasonably be expected to be the highest. At the last term of our Circuit Court there were only five new suits on the appearance docket, and at the last November term (a jury term) the Grand Jury only made three presentments. This shows that our citizens are not only moral, but are either free from debt or opposed to litigation.

Any visitor to our county would not fail to notice the orderly and peacable character of the people, and we believe that there is less drunkenuess and gambling in Calvert than in any other county in the State in proportion to its population.

It is true that our people have not yet secured a railroad, either built, or extensively graded, and in this respect it is behind every other county in the State, but as they have recently bestowed more attention upon improvement of their public roads they may yet become sufficiently progressive as to secure a railroad.

In fact the natural advantages of Calvert are so great that a man unable or unwilling to procure other subsistence might live here all the year round without using any other labor than what might be necessary to gather in fish, oysters, terrapins and uncultivated fruits.

We are not so selfish as to desire the seclusion of Calvert and merely mention a few of its characteristics that the rest or mankind may know more of its attractiveness."

We think in all we have said and quoted, we have shown that Calvert county is too desirable a locality not to be noticed, and visited by any man from other States or any foreigner, who may be seeking a home for life, and where he can obtain all that a reasonable man can expect for such an insignificant sum per acre as most farms can be obtained for, in this section of Maryland. Lands are lower priced in Calvert than any county in the State, in proportion to their natural advantages and readiness with which they respond to the action of clover and plaster in restoring them to their original fertility.

Some years since that able jurist and enterprising citizen of this county, Hon. Daniel R. Magruder, an Associate Justice of the Circuit Courts, for the Seventh Judicial Circuit, aided in his efforts by a few prominent gentlemen in the counties of Anna Arundel and Calvert and in the City of Baltimore, obtained a charter and organized a company, under the style of the Baltimore and Drum Point Railroad Company. The whole route was surveyed, estimates made, a large amount of stock subscribed and the work practically begun and carried on to a considerable extent, when the pressure came and it like many other public works had to suspend its operations for the time for the want of funds. We have no doubt that in the very near future this great work will be perfected and open up a direct communication with Baltimore through the centres of Anne Arundel and Calvert counties, having its terminus at the extreme end of the latter county-Drum Point. This road, when completed, will be the shortest and quickest route from Baltimore to Norfolk and the South. The harbor at Drum Point is large enough to hold the Nation's Fleets, with water deep enough to float the largest ships in the world, and is an open, ice-free port all winter, United States Engineers pronounce it to be the most favorably located for a coal depot in the whole union, convenient as it is to the immense coal-fields of Western Maryland.

There, at any season, when other harbors and ports are blocked with ice, a vessel could enter and coal, safe from storms and ice. This road will revolutionize when completed the entire character of this county, and add millions to its wealth and increase the value of real estate immensely.

We cannot resist the temptation to quote the following hearty endorsement of our efforts in behalf of immigration, and add our thanks for the promised support, on the part of that sprightly and popular weekly, "Laurel Gleaner," recently commenced at Laurel, Prince George's County, Md:

"In connection with the immigration question, which is now happily engaging the attention of our people, we desire to call attention to an article, elsewhere printed, from that sterling agricultural journal, the old Maryland Farmer. In that article, which claims Maryland as the home for immigrants, special allusion is made of the many natural advantages and resources of our grand old county of Prince George's. Those who are looking for homes where nature has placed mines of untold wealth at their very doors, are invited to come and see us. We want "live" men among us; men who seeing an opportunity, are not afraid to grasp it. We hope that the friends of progress and improvement may occasionally favor us with their views on these two important questions-Immigration and Reducted Taxation. Fossilism will die hard, but we must kill and bury it. Then, and then only, will grand old Prince George's assume again the proud and triumphant place which she once had in the galaxy of counties-the banner-county of the State."

DATE TREE.—The date tree is a palm tree, and leaves cut from the date tree under the name of palms, are used in the ceremonies of Palm Sunday, which is the Sunday before Easter, when the multitude cut down palm trees and strewed them in the path of our Lord. Almost every part of this tree is valuable. It is valuable for its fruit and for the palm wine drawn from its trunk. Its leaves are made into hats and baskets, and the fibres of the stem of the leaves are made into cords and twine.

LADIES DEPARTMENT.

Chats with the Ladies for August.

BY PATUXENT PLANTER.

"Tis Summer, and the flowers lift their faces Serenely splendid to the morning sun. And crimson streaked petunias overrun With lavish color all the garden spaces.

Half in a flush of clustering roses lost,
We languish on the verdant turf or flowery bed;
Enchanting are the shades around us spread,
While songs of birds echo through field and wood.

Now a translucent haze the sunlight follows
And veils the fervent sky in dreamy light,
Involves in mist the luminous mountain height,
And fills with violet shade the mountain-hollows."

As the season is so prostrating, it will be a bore to hold a prosy talk or a long one, so I shall be short and begin by asking you not to think I design to be impertinent, when most of what I have to say is in the form of questions for you to ponder over and answer when you choose.

What efforts have each of you made to make your rural homes comfortable and attractive during this summer solstice, so as not to make your young folks pine for some mountain resort or sea shore?

Have you provided dense shade, cool arbors, covered with sweet-smelling flowers-made the place a home for birds, by providing unique, tasty but inexpensive houses among the trees and the shubberry, for their comfortable and save sheltergot a croquet ground-a fine lawn and a beautiful collection of flowers in borders and beds? Have you a well selected library and a supply of useful and pleasant periodical literature for mental recreation? Have you a good kitcken garden, that necessary appendage to every well conducted household, which combines the useful with the ornamental and which furnishes those substantial comforts and solid gratifications that make a country home so attractive in summer? Have you a good dairy and a full supply of ice, with an abundance of choice fruits, of all sorts, ripening in succession, so as to keep up a supply during the season, embracing the small fruits, cherries, apricots, plumbs, peaches and pears, with the luscious melons interspersed? Is the poultry yard well supplied with the different breeds of domestic fowls? Have you an Apiary and Dove-cote or a pigeon loft for the choicest breeds, such as Fantails, Carriers, Barbs, etc.? Now each and all of these things really cost but a small outlay, and not a great deal of labor or time, if judiciously

begun and persistently and systematically conducted. Without all or at least a goodly portion of these acquisitions, there are few attractions, and less comfort in country-life for visitors or the junior members of a household. Having all these "creature comforts," sources of mental improvements and physical recreation, a homestead is Paradise. We will not give a name to a reverse picture, such as is too often seen-a tumble down, unpainted house, shutters broken or not to be seen, windows with broken pains pasted with paper, no lawn, no flowers, no shade, a few cabbage and potatoes in a patch called the garden, no books or papers, no appliances for pleasant exercises, in fact, no nothing. Everybody, however poor, can at least have shade and grass and a few climbers about the house sides and porch. But we will not dwell upon this topic pleasant or otherwise.

I take the liberty to recommend these two plain dishes. A good summer dish for breakfast or tea, eaten with rich cold milk.

SWEET POTATO PONE.—Take four large sweet potatoes, peel and grate them, then add two cups of water or milk, a lump of butter the size of an egg, melted, three eggs well beaten, a teaspoonful each of alspice and cinnamon, one and a half teaspoonfuls of ginger, and a half nutmeg, grated; mix all the ingredients well, butter a pudding pan, pour in your pone and bake in a moderate oven.

OUR SUCCOTASH OR GUMBO SOUP.—One pint of corn cut from the green cob, one pint of green beans, lima or full grown snap beans, shelled, one pint of sliced, ripe tomato, one pint of tender okra, cut in small pieces, one pound of salt pork, sliced, or one pound of veal or lamb, salt and pepper, a bunch of savory and thyme, cover the whole with water, boil well 40 minutes. To be more delicate leave out the meat and tomato, to the corn, okra and beans when well boiled, add one-quarter pound of butter, and half a pint of rich milk, let it boil up once and serve. This is an excellent and cheap soup for summer and autumn.

THE ANNUAL MEETING OF THE NATIONAL AGRICULTURAL CONGRESS, will meet at Rochester, N. Y., on the 15th of September, two days before the American Pomological Society assembles, so that both those important conventions will be going on at the same time, adding a two-fold inducement for summer travellers, and all persons engaged in agriculture and its kindred pursuit, to be present at these meetings. Perhaps the same opportunity will never again present itself, when these two great national institutions will hold their meetings at the same time and in the same appropriate locality.

For the Maryland Farmer.

A Peach Growing on a Grape Vine.

GEORGIA, July 19th, 1879.

Messrs. Editors:

While passing through my vineyard a few days a go, I discoverey a singular freak of nature, to wit, a peach growing on a grape vine, I could scarely believe it, and was anxious for it to mature and satisfy my curiosity, but some one, (probably attracted by the singularity of it) plucked it and left it on the ground. It was one inch and a quarter in diameter when plucked. Upon examination I find it had a well developed peach stone, and within which, seemed to be small elongated seeds. The peach was covered with fir, a peach tree within about 12 or 15 feet and limbs reaching within 6 to 8 feet of the grape vine. The bloom must have fallen in the joint when freshly pruned, and thus amalgamated. I would like to know if you or any of your readers can throw any light on this strange freak of nature. I send a Yours truly. rough sketch.

P. W. PRINTUP.

P. S.—I do a little summer pruning.

[Will some of our horticultural friends explain this sport or freak of nature?—EDS. MD. FAR.]

CATALOGUES RECEIVED.

"The Berkeley County Agl. Society," will hold its 8th annual fair at Martinsburg, W. Va., on the 14th 15th, 16th and 17th of October, 1879. The catalogue shows a liberal list of premiums.

From J. T. Lovett, catalogue of Strawberry Plants, Monmouth Co., N. J.

"Premium List of North Georgia Stock and Fair Association." 2d annual meeting to be held October 20th, 1879, and continuing one week, at Oglethorpe Park, Atlanta, Ga. There are nearly 1400 premiums offered on the list and aggregates a large amount. Their first meeting was very successful, and this one will no doubt be more so.

AMERICAN POMOLOGICAL SOCIETY.—We would call especial attention to the meeting of this great national association, to be held in Rochester, N. Y., beginning on Wednesday the 17th of September It will be a very interesting meeting, and particularly so. as it will be at the homes of the great pomologists, Ellwanger and Barry, and where the venerable Vick—king of flowers—rules his flowery realm. Besides there are numbers of other large nurseries around this beautiful city of fruits and flowers with many other attractions for the tourist and those who seek pleasure combined with horticultural knowledge.

The Cherry.

The cherry comes originally from Asia. After a victorious expedition into Pontus, the Roman general Lucullus brought the cherry from Cerasus, a sown of that province, into Italy. Soldier though he was, this Lucullus always had an eye open to whatever was agreeable in the way of food; and it is not to be doubted that he regarded the cherry as one of the proudest of all his trophies.

The cherry was then brought to Rome about seventy years before Christ. About one hundred an twenty years later it was introduced into Great Britain. From Italy it was brought also into all the other countries of Europe—in every one of which it is now a universal favorite with all classes of the people.

The Roman horticulturists soon invented other species of the cherry, and Pliny makes mention of eight different varieties which were extant in his day. It shows what great things can be wrought by cultivation and art, that more than three hundred different varieties are now specifically described in the official catalogues.

The gum of the cherry is almost identical with gum arabic. It has frequently been utilized for food, and the degree of nutriment found in it is something surprising. The wood of the cherry is very beautiful and is much used for furniture. Some persons of good taste admire it as much as mahogany. It is hard, compact and tough, and it possesses the rare virtue of not warping. It takes an a very high polish. Its beautiful reddish tint, instead of fading with time, grows deeper and richer every year.

The cherry tree is so large and beautiful in our own country that it is strange that it is not planted and grown more frequently as an ornamental shade tree. In Germany the cherry tree is a great favorite for these purposes. Many roadsides in Germany are lined with cherry trees on both sides. You will frequently pass through an avenue of these beautiful shade trees for miles at a time. .*

The seeds of the cherry were brought to America at an early day by colonists, both from England and Holland. Besides these cultivated cherries, there is a wild cherry which is indigenous to this country.

The largest and grandest cherry trees I have ever read of are found in West Virginia. While they grew in Germany to be four feet in diameter and sixty and seventy feet high, they are found in West Virginia as large as five, six and even seven feet through, and sometimes one hundred feet high.

The wild cherry is more commonly called choke-

berry. It grows not only in the Eastern and Middle States, but in the far West—in Utah, Arizona and other Rocky Mountain States; also in Oregon. The wild cherry is a great favorite with the Indians. They make a tea of the bark, which they greatly relish. They also pound the bark fine, dry it in the sun and boil it in meat broths. They mix it also with meal, which they make from various roots or seeds.

Great as are the natural adaptations of our country to the growth of the cherry, this fruit in America has by no means attained all the excellence of which it is capable, and it is to be hoped that those public journals which are favorable to horticulture will exert themselves to stimulate their fruit-growing readers to aim at still higher perfection in the cherry.—Philadelphia Times.

New Advertisements.

We call attention of all who want to plant fine large plants of the choicest sorts of strawberries, to the advertisement of those reliable, long established and popular nurserymen and horticulturists, Messrs. Ellwanger & Barry of Rochester, N. Y. It should be borne in mind that August is the best month to set out strawberry plants with anything like a certainty of getting a small crop next summer.

W. W. Giles, Well Augur.

James F. Epes, two fine farms in Virginia.

C. A. Snow & Co., Patent Agents.

A. T. Houck, Fever and Ague Pills.

Stieff, Pianos. He claims that his Pianos received the honors over all others at the Paris Exposition 1878. We know him to be a first-rate manufacturer of this popular musical instrument.

The N. Y. Furnishing Co. One of the very largest Shirt Houses in the country. Owing to their peculiar facilities—large capital, astuteness in laying in immense supplies of cotton when it was cheap, and having it manufactured to their order,—they can, and do, sell at the lowest rates shirts and other under-garments of best quality.

Louis Brecht, Variety Iron works.

Wm. Parry, Pomona Nursery. Ten acres in Strawberry Plants, fifty varieties. No more reliable nurserymen to be found in the whole country than friend Parry of Cinnaminson, N. J.

P. S. Chappell & Son, manufacturers of Super Phosphates and Flour of Bone. We recognize the fact that a third of a century ago, the originator of this firm was one of the leading pioneers in manipulating fertilizers for immediate action on the growth of plants. These gentlemen should be from long education and practical experience, thoroughly qualified to manufacture the best articles, and we are confident they are perfectly reliable and trustworthy.

PUBLICATIONS RECEIVED.

"The Honey Bee," by Thomas G. Newman, editor of American Bee Journal, Chicago, Illinois. This is a valuable little book, describing all the newest discoveries in the art of bee culture, with minute directions in making hives and in the use of the honey extractor, &c., It is profusely illustrated with excellent engravings, and to every bee keeper worth much more than its cost—40 cents.

"Bulletin of the American Berkshire Association." This is a monthly of 24 neatly printed pages, containing well executed illustrations and instructive matter relating to hogs in general, and Berkshires in particular, with a register of this breed after the manner of cattle herd books.— Terms \$1 per annum.

The "Fancier's Weekly," lately published in Baltimore by our friend H. F. Whitman, has been sold to the Ferris Publishing Co. of Albany N. Y., (who also publish the Poultry Monthly) comes to us in improved and enlarged form and seems likely to more than maintain its remarkable popularity as an advertising medium, it obtained under its late conductors,—Terms \$1 per year.

"Quarterly Report of the Kansas State Board of Agriculture." Full of interesting information with an excellent colored map of the State, divided in counties, &c.

Ravages of the Tobacco Fly.

The prevention of the ravages of the tobacco fly which destroys so many plants, is a very important thing. No doubt putting two feet of plank, in height, around the bed does a great deal of good; also, sowing mustard seed around the bed has some effect; and the forcing plants forward by rich fertilizers and guanos, and watering, should not be neglected; but unfortunately in very cold spells nothing will make the plants grow.

Two years ago we suggested the use of Paris green, which was so destructive to insect life. We have used it for the potato beetle very successfully in the liquid state, by putting a teaspoonful of the powder into a two gallon watering pot, stirring it frequently, and sprinkling it from the nozzle. We have but little doubt but what it would act very well in this form, sprinkled over the tobacco beds, and it is less dangerous than in the form of powder.—Dr. Pollara,

THE MARYLAND FARMER is a first-class monthly magazine, devoted to agriculture, horticulture and rural economy. It is published at Balimore, and well worth its price of \$1 per annum,— Georgia Central Weekly.